

# JANE'S FIGHTING SHIPS

## 1954-55

FOUNDED IN 1897 BY FRED T. JANE



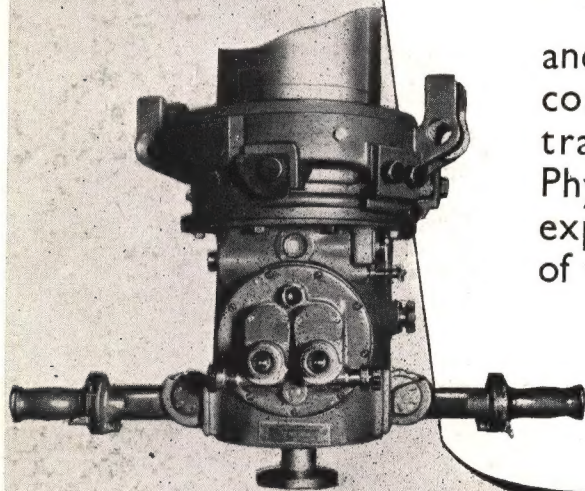
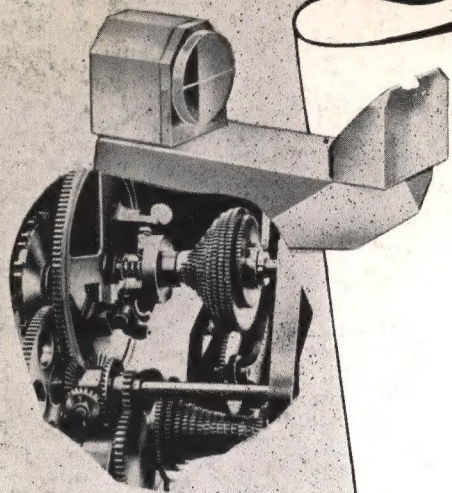
Editor:  
RAYMOND V. B. BLACKMAN,  
A.M.I.N.A., A.I.Mar.E.

Publishers:  
THE MCGRAW-HILL BOOK COMPANY Inc.  
330 WEST 42nd STREET  
NEW YORK 18, N.Y.



JANE'S FIGHTING SHIPS 1954-1955

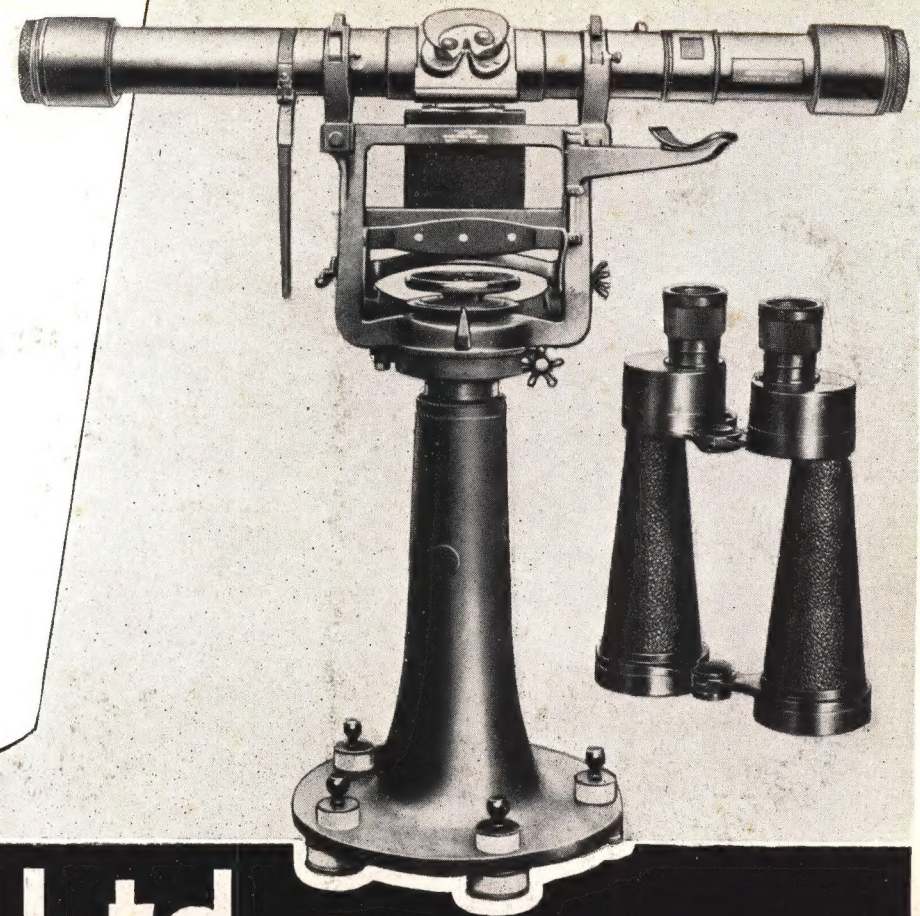




**Messrs. Barr & Stroud Limited**  
specialise in the design and manufacture of high precision machines and instruments, Mechanical, Optical and Electrical, for the Navy, Army and Air Force. Their extensive works are fully equipped with modern plant, permitting rapid quantity production of the highest quality.

Their Research Laboratories and Development Department are controlled and staffed by highly trained Mechanical Engineers, Physicists and Electronics Engineers, experienced in carrying out projects of wide variety and complexity.

*Founded in 1888  
by  
Professor Archibald Barr  
Professor William Stroud*



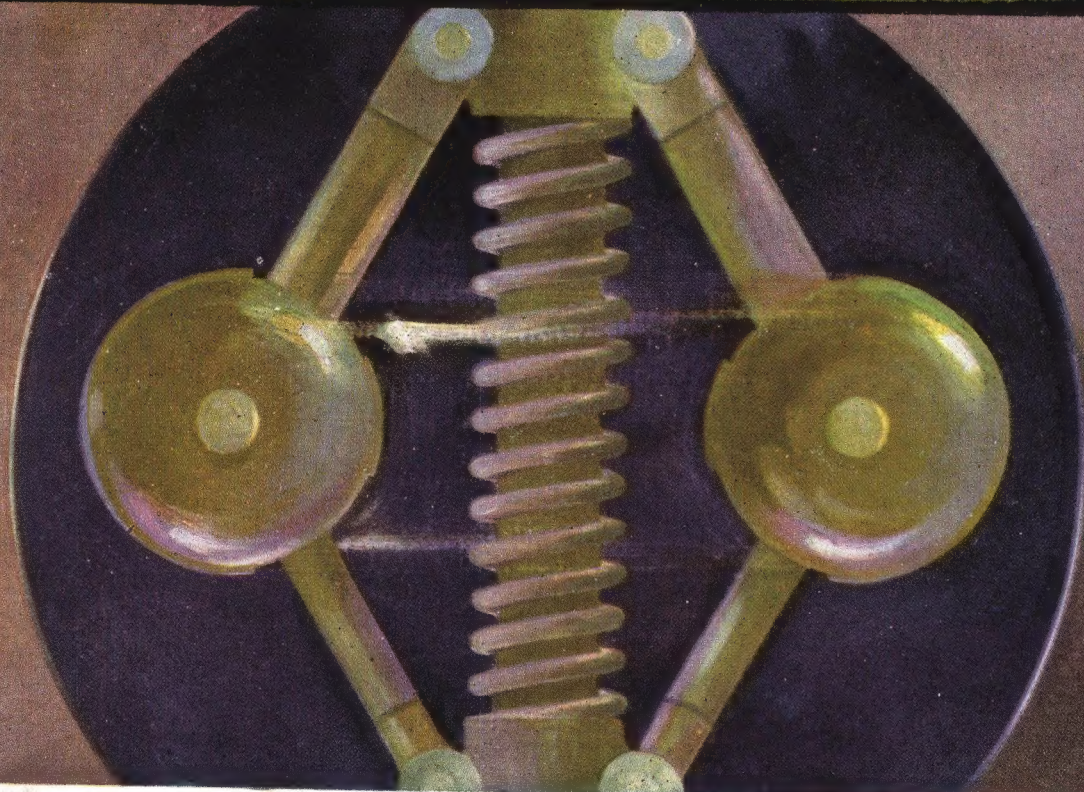
# BARR & STROUD Ltd.

ANNIESLAND, GLASGOW W. 3.

London Office: 15 VICTORIA STREET S.W. 1.



# ACCURATE SPEED CONTROL



## *Iso-Speedic*

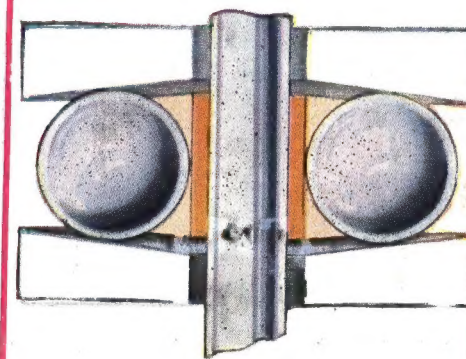
Iso-Speedic governors embody fly-bobs which consist of hardened steel balls rolling on ground tracks, eliminating all static friction, and resulting in a high degree of accuracy.

They are used on diesel engines and petrol engines, and are available for other speed control applications.

Iso-Speedic governors can be supplied which give control within 0.3% and are used on generators for radar and television. Other Iso-Speedic governors are available where a lower degree of accuracy is sufficient.

The services of our engineers are at your disposal.

THE ISO-SPEEDIC COMPANY  
LTD., COVENTRY







## H.M.S. "DAINTY"

*As in other fighting ships, **NORAL ALLOYS** have been used extensively in the structure, machinery, weapons and fittings of H.M.S. "Dainty."*

**Northern Aluminium** COMPANY LIMITED

MAKERS OF NORAL SHEET, STRIP, PLATE, SECTIONS, TUBING, WIRE FORGINGS, CASTINGS, ALPASTE FOR PAINT. SALES DEVELOPMENT  
DIVISION: BANBURY, OXON. • SALES OFFICES: LONDON, BIRMINGHAM, MANCHESTER, BRISTOL, NEWCASTLE-ON-TYNE, LEEDS

An ALUMINIUM LIMITED Company





## LAUNCHED: AN ATOMIC SUBMARINE

The "USS *Nautilus*", world's first atomic powered submarine, was launched in 1954 at our Electric Boat Division yards in Groton, Connecticut, U.S.A. A second atomic submarine, the "*Sea Wolf*", which will employ a different kind of nuclear reactor, is on the ways now.

New target type submarines, reconversion of older submarines and construction of modern attack submarines have been a part of Electric Boat Division's program during the last year.

Canadair Limited, our Canadian aircraft subsidiary, and other divisions in the United States, including the new Convair Division (formerly Consolidated Vultee Aircraft Corporation), have continued their production of supersonic aircraft, guided missiles, commercial aircraft and marine and industrial electric motors of advanced design.

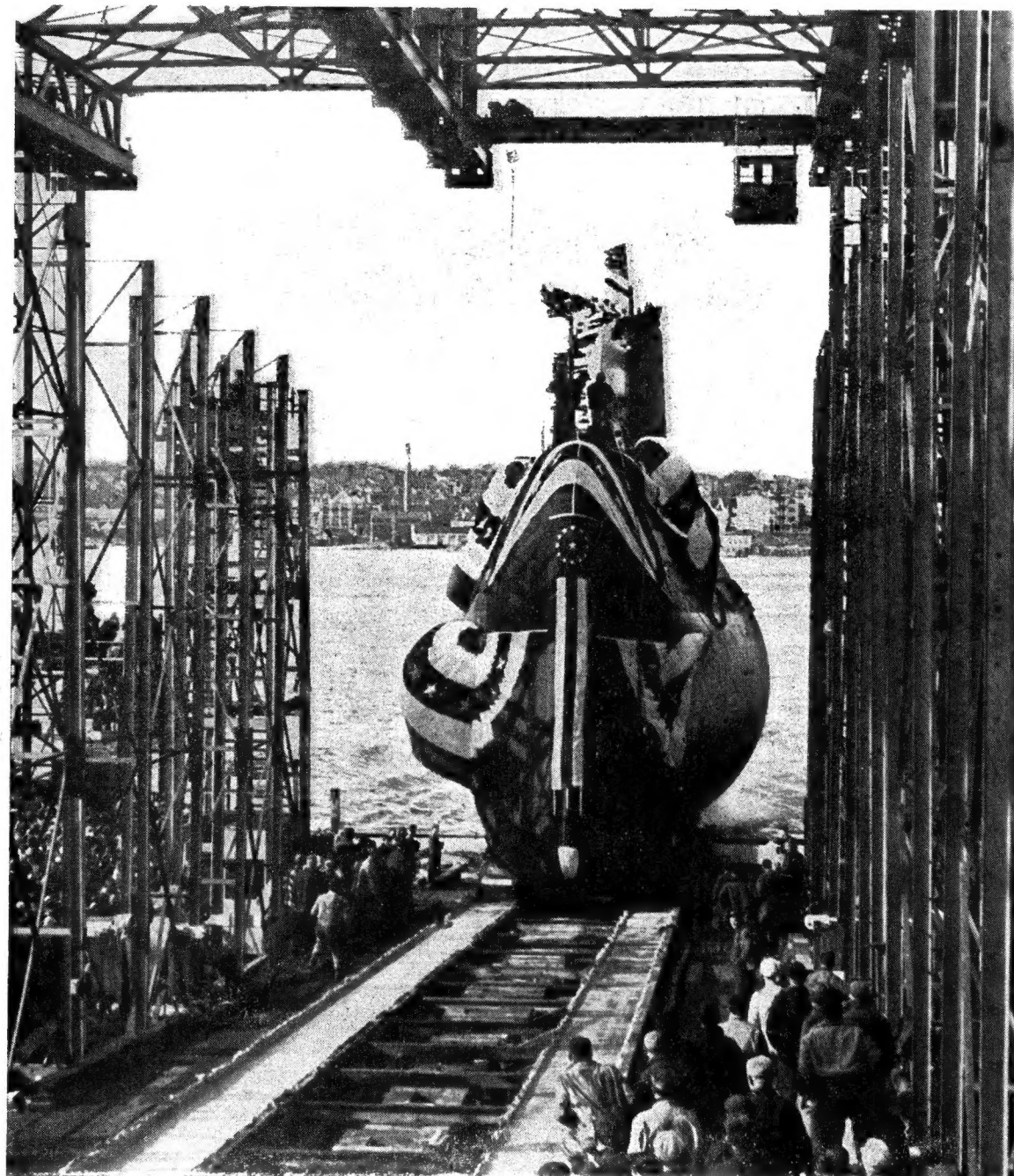
**GENERAL  DYNAMICS**

DIVISIONS



ATOMIC POWERED SUBMARINES • SUPERSONIC AIRCRAFT • GUIDED MISSILES • ELECTRIC MOTORS

**GENERAL DYNAMICS CORPORATION • 445 PARK AVENUE, NEW YORK**





## ALPHABETICAL LIST OF ADVERTISERS

	Page.
Aiton & Co., Ltd. . . . .	39 adv.
Aktiebolaget Bofors (Sweden) . . . .	38 „
Auto-Klean Strainers, Ltd. . . . .	49 „
Babcock & Wilcox, Ltd. . . . .	57 „
Barr & Stroud, Ltd. . . . .	<i>Inside Front Cover</i>
Bassett-Lowke, Ltd. . . . .	45 „
Beldam Asbestos Co., Ltd. . . . .	45 „
Bethlehem Steel Co. (U.S.A.) . . . .	37 „
Birkett, T. M., & Sons, Ltd. . . . .	42 „
British Insulated Callender's Cables, Ltd.	12 „
British Thomson-Houston Co., Ltd., The	21 „
Brown, John, & Co., Ltd. . . . .	53 „
Brown, S. G., Ltd. . . . .	45 „
Cammell Laird & Co., Ltd. . . . .	34 „
Clarke, Chapman & Co., Ltd. . . . .	35 „
Cockburns, Ltd. . . . .	45 „
Dansk Industri Syndikat (Denmark) . . .	43 „
Decca Radar Ltd. . . . .	59 „
de Havilland Aircraft Co., Ltd., The . .	54 „
Electric Boat Division of General Dynamics Corporation . . . . .	4 „
Electro Dynamic Construction Co., Ltd. .	23 „
Fairey Aviation Co., Ltd., The . . . .	42 „
General Dynamics Corporation . . . . .	4 „
Götaverken (Sweden) . . . . .	7 „
Graham, Alfred, & Co., Ltd. . . . .	43 „

	Page.
Harland & Wolff, Ltd. . . . .	30 adv.
Hastie, John, & Co., Ltd. . . . .	6 „
Hawthorn, Leslie, R. & W., & Co., Ltd.	32 „
I.C.I. Metals, Ltd. . . . .	50 „
Ingalls Shipbuilding Corporation, The . .	22 „
International Paints, Ltd. . . . .	<i>Inside Back Cover</i> „
Iso-Speedic Co., Ltd., The . . . . .	2 „
Kent, George, Ltd. . . . .	41 „
Kockums Mekaniska Verkstads A.B. (Sweden) . . . . .	9 „
Korody Marine Corporation (U.S.A.) . .	13 „
London Electric Firm Ltd. . . . .	39 „
McGeoch, William, & Co., Ltd. . . . .	43 „
MacTaggart, Scott & Co., Ltd. . . . .	44 „
Marconi's Wireless Telegraph Co., Ltd. .	25 „
Metallic Valve Co., Ltd., The . . . .	46 „
Mitsubishi Zosen Kabushiki Kaisha . .	58 „
Napier, D., & Son, Ltd. . . . .	16 „
Nederlandsche Vereenigde Scheepsbouw Bureaux (Holland) . . . . .	26 „
New Equipment, Ltd. . . . .	50 „
Newton Brothers (Derby), Ltd. . . . .	29 „
Northern Aluminium Co., Ltd. . . . .	3 „
Ottway, W., & Co., Ltd. . . . .	44 „

	Page.
Parsons Marine Steam Turbine Co., Ltd., The . . . . .	19 adv.
Philips' Telecommunicatie Industrie, N.V. (Holland) . . . . .	18 „
Pye, Ltd. . . . .	60 „
R.F.D. Co., Ltd. . . . .	56 „
Rees Mace Marine Ltd. . . . .	60 „
Record Electrical Co., Ltd., The . . . .	48 „
Red Hand Compositions Co., The . . . .	55 „
Sampson Low, Marston & Co., Ltd. . . .	41 & 46 „
Saunders-Roe (Anglesey) Ltd. . . . .	27 „
Siebe, Gorman & Co., Ltd. . . . .	48 „
Sperry Gyroscope Co., Ltd., The . . . .	40 „
Telephone Manufacturing Co., Ltd. . . .	47 „
Thornycroft, John I., & Co., Ltd. . . .	28 „
Vickers-Armstrongs, Ltd. . . . .	51 & 52 „
Vosper, Ltd. . . . .	24 „
Ward, Thos. W., Ltd. . . . .	36 „
Whipp & Bourne, Ltd. . . . .	31 „
White, J. Samuel, & Co., Ltd. . . . .	49 „
Van der Horst Corporation of America . .	33 „
Yarrow & Co., Ltd. . . . .	47 „
Yorkshire Copper Works, Ltd., The . .	20 „



# HASTIE

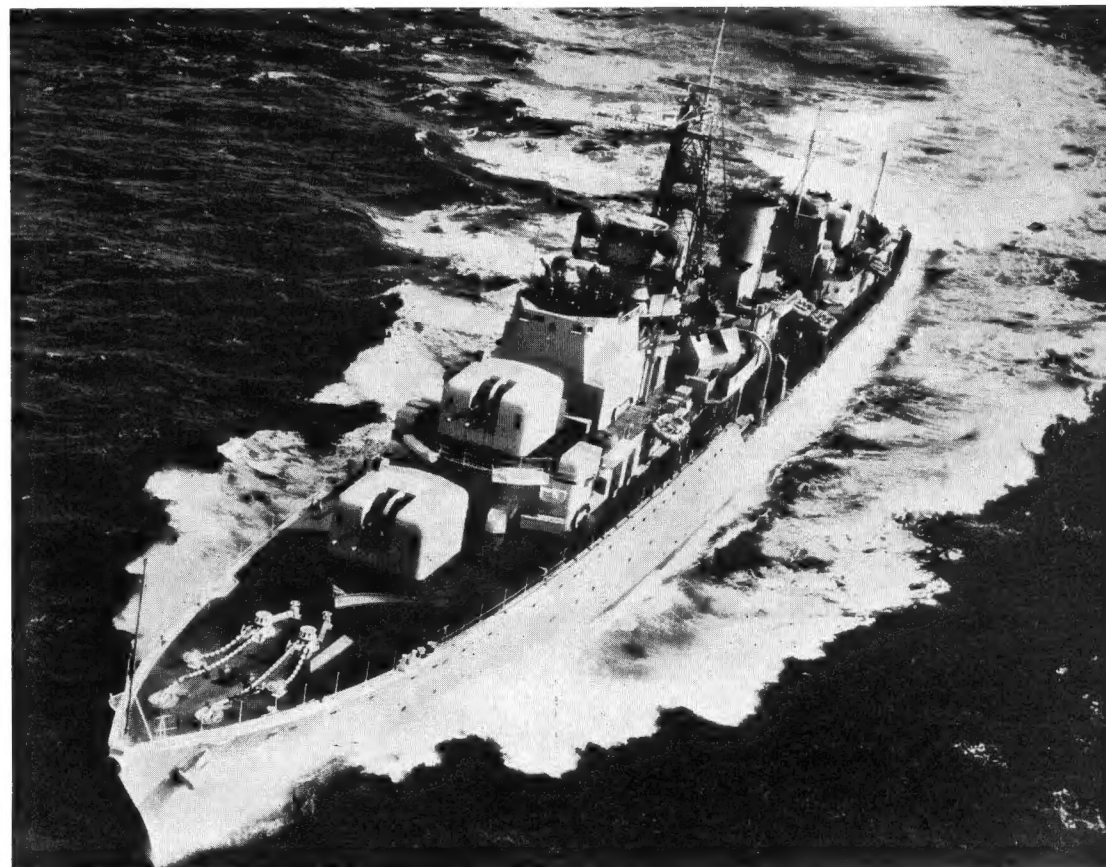
ESTABLISHED 1845  
**GREENOCK**

MAKERS OF  
ELECTRIC HYDRAULIC  
AND STEAM HYDRAULIC  
STEERING GEARS  
FOR  
ALL CLASSES OF VESSELS

JOHN HASTIE & CO., LTD.  
GREENOCK

Telegrams: "HASTIE, GREENOCK"

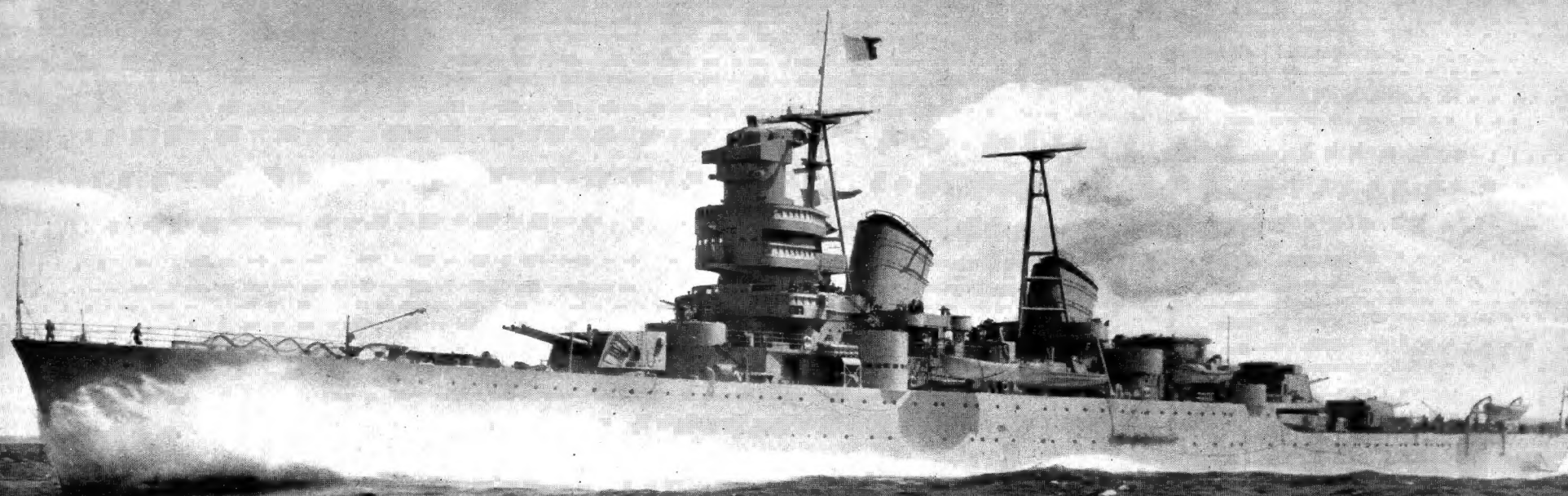
Telephones: Greenock 22286-7-8-9



Hastie's Steering Gears were fitted in the "DARING" class Destroyers "DELIGHT", "DEFENDER", "DUCHESS" and "DIANA"



Swedish cruiser "Tre Kronor"



# GÖTAVVERKEN

GÖTEBORG · SWEDEN



SHIPBUILDERS  
SHIPREPAIRERS  
ENGINEERS



# JANE'S FIGHTING SHIPS

*Publishers and Proprietors :—*

JANE'S FIGHTING SHIPS PUBLISHING CO., LTD.

*Supplied in Europe and Asia by:—*

SAMPSON LOW, MARSTON & CO. LTD.  
25, Gilbert Street, London, W.1., England

*Supplied in U.S.A., Mexico, Central and South America by :—*

THE MCGRAW-HILL BOOK COMPANY, INC.,  
330, West 42nd Street, New York, 18, U.S.A.

*Supplied in Canada by :—*

THE MCGRAW HILL COMPANY OF CANADA, LTD.  
253, Spadina Road, Toronto, 4, Canada

*Supplied in Africa by:—*

PURNELL & SONS (S.A.), PTY., LTD.  
52, Keerom Street, Cape Town, South Africa.

*Supplied in Australia by:—*

PONSFORD, NEWMAN & BENSON, LTD  
234, Flinders Lane, Melbourne, Victoria (and branches)

*Supplied in New Zealand by:—*

WHITCOMB & TOMBS, LTD.  
Christchurch, New Zealand, (and branches)

EDITORIAL OFFICES:

*All communications for the Editor should be addressed to:—*

THE EDITOR, JANE'S FIGHTING SHIPS,  
25, Gilbert Street, London, W.1.

ADVERTISEMENT OFFICES:

*All communications in regard to advertising should be addressed to:—*

The Advertisement Managers, JANE'S FIGHTING SHIPS,  
THE TRADE PRESS ASSOCIATION, LTD.  
57-61, Mortimer Street, London, W.1.

## CLASSIFIED LIST OF ADVERTISERS

	Page.		Page.		Page.		Page.
<b>AERO GUN-SIGHTS.</b>		<b>ALUMINIUM CASTINGS</b>		<b>AUTOMATIC TELEPHONY EQUIPMENT.</b>		<b>BINOCULARS.</b>	
Ottway, W., & Co., Ltd. . . . .	44 adv.	" <b>FORGINGS</b>		Philips' Telecommunicatie Industrie . . . . .	18 adv.	Barr & Stroud, Ltd. <i>Inside Front Cover</i> . . . . .	"
<b>AIR HEATERS.</b>		" <b>SECTIONS</b>		Pye, Ltd. . . . .	60 "	<b>BOATS, INFLATABLE.</b>	
Babcock & Wilcox, Ltd. . . . .	57 "	" <b>SHEETS</b>		<b>AUTOMATIC VOLTAGE REGULATORS.</b>		R.F.D. Co., Ltd. . . . .	55 adv.
<b>AIRBORNE DELIVERY RESCUE GEAR.</b>		" <b>PLATES</b>		British Thomson-Houston Co., Ltd.,		<b>BOILERS.</b>	
R.F.D. Co., Ltd. . . . .	56 "	" <b>WIRE</b>		The . . . . .	21 "	Babcock & Wilcox, Ltd. . . . .	57 "
<b>AIRCRAFT.</b>		" <b>TUBES</b>		Newton Brothers (Derby), Ltd. . . . .	29 "	Brown, John., & Co., Ltd. . . . .	53 "
de Havilland Aircraft Co., Ltd., The . . . . .	54 "	" <b>PASTE</b>		<b>AUXILIARY MACHINERY.</b>		Cammell Laird & Co., Ltd. . . . .	34 "
Fairey Aviation Co., Ltd., The . . . . .	42 "	Northern Aluminium Co., Ltd. . . . .	3 adv.	Auto-Klean Strainers, Ltd. . . . .	49 "	Harland & Wolff, Ltd. . . . .	30 "
<b>AIRCRAFT INSTRUMENTS.</b>		<b>AMMETERS.</b>		Clarke, Chapman & Co., Ltd. . . . .	35 "	Hawthorn, Leslie, R. & W., & Co.,	
Siebe, Gorman & Co., Ltd., . . . . .	48 "	Record Electrical Co., Ltd., The . . . . .	43 "	<b>AUXILIARY TURBO ALTERNATORS AND GENERATORS.</b>		Ltd. . . . .	32 "
Sperry Gyroscope Co., Ltd., The . . . . .	49 "	<b>AMMUNITION HOISTS.</b>		British Thomson-Houston Co., Ltd.,		Nederlandsche Vereenigde Scheeps-	
<b>AIRSHIPS.</b>		Clarke, Chapman & Co., Ltd. . . . .	35 "	The . . . . .	21 "	bouw Bureaux . . . . .	26 "
R.F.D. Co., Ltd. . . . .	55 "	Vickers-Armstrongs Ltd. . . . .	51 & 52 "	<b>BALLOONS.</b>		Thornycroft, John I., & Co., Ltd. . . . .	28 "
<b>ALTERNATORS.</b>		<b>ANTI-FOULING COMPOSITIONS.</b>		R.F.D., Co., Ltd. . . . .	56 "	Vickers-Armstrongs, Ltd. . . . .	51 & 52 "
British Thomson-Houston Co., Ltd.,		International Paints, Ltd. <i>Inside Back Cover</i>		<b>BANNER TARGETS.</b>		Ward, Thos. W., Ltd. . . . .	36 "
The . . . . .	21 "	Red Hand Compositions Co., The . . . . .	55 "	R.F.D. Co., Ltd. . . . .	56 "	White, J. Samuel, & Co., Ltd. . . . .	49 "
Electro Dynamic Construction Co.,		<b>ARMOUR PLATES.</b>		Ingalls Shipbuilding Corporation, The . . . . .	22 "	Yarrow & Co., Ltd. . . . .	47 "
Ltd., . . . . .	23 "	Aktiebolaget Bofors . . . . .	38 "				
Newton Brothers (Derby), Ltd. . . . .	29 "						



# KOCKUMS

MEKANISKA VERKSTADS AKTIEBOLAG

MALMÖ—SWEDEN

FOUNDED 1840

Number Employees end 1953, 5,000

9 Building Berths up to 750 ft. length

3 Dry Docks of 617, 534 and 210 ft. length

## MANUFACTURING PROGRAMME

Merchant Vessels up to 50,000 t.d.w.

War Ships

Ship Repairs

Diesel Engines, System Kockum-MAN

Steam Turbines, System Kockum—De Laval

Cranes and Bridges

Locomotives, Diesel and Diesel-

Electric

Railway Cars

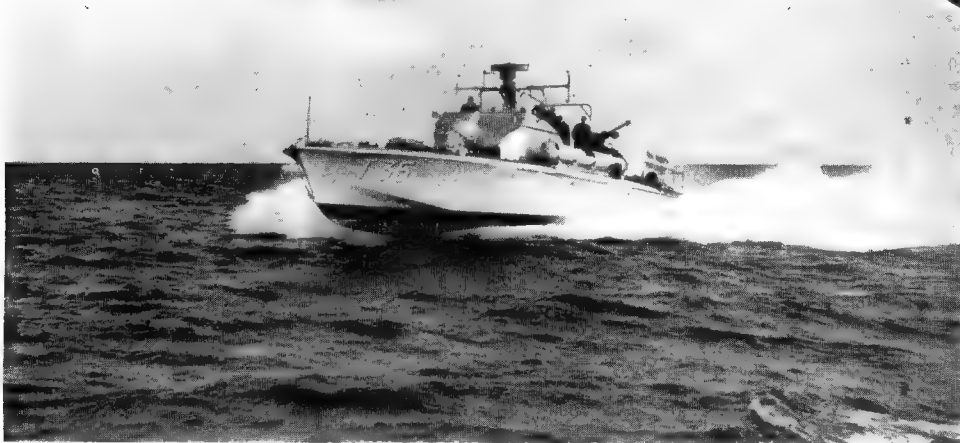
Armoured Cars and Tanks

Excavators

"TYFON" signal apparatus



The Swedish Destroyer *Öland* of 1850 tons std.



A 65' M.T.B. All-welded steel construction.

11 Merchant Ships delivered in 1953, 178,960 t.d.w.

## WARSHIP DELIVERIES up to 1953

3 Armoured Coast Defence Ships

7 Destroyers

26 Submarines

24 Motor Torpedo Boats, etc.



# CLASSIFIED LIST OF ADVERTISERS—continued.

	Page.
<b>BOILER FEED AUXILIARIES.</b>	
Babcock & Wilcox, Ltd. . . . .	57 adv.
Ward, Thos. W., Ltd. . . . .	36 "
<b>BOMB SLINGS.</b>	
R.F.D. Co., Ltd. . . . .	56 "
<b>CABLES (ELECTRIC).</b>	
British Insulated Callender's Cables, Ltd. . . . .	12 "
<b>CAPSTANS AND WINDLASSES.</b>	
Clarke, Chapman & Co., Ltd. . . . .	35 "
<b>CASTINGS, ALUMINIUM BRONZE.</b>	
Birkett, T. M., & Sons, Ltd. . . . .	42 "
<b>CASTINGS, NON-FERROUS.</b>	
Birkett, T. M., & Sons, Ltd. . . . .	42 "
McGeoch, William, & Co., Ltd. . . . .	43 "
Northern Aluminium Co., Ltd., . . . .	3 "
Vickers-Armstrongs, Ltd. . . . .	51 & 52 "
Vosper, Ltd. . . . .	24 "
<b>CASTINGS, STEEL.</b>	
Aktiebolaget Bofors . . . . .	38 "
Vickers-Armstrongs, Ltd. . . . .	51 & 52 "
<b>CHEMICAL PROOF CLOTHING.</b>	
R.F.D. Co., Ltd. . . . .	56 "
Siebe, Gorman & Co., Ltd. . . . .	48 "
<b>CHROME HARDENING.</b>	
Van der Horst Corporation of America . . . . .	33 "
<b>CLEAR VIEW SCREENS.</b>	
Kent, George, Ltd. . . . .	41 "
<b>COMPASSES.</b>	
Brown, S. G., Ltd. . . . .	45 "
Sperry Gyroscope Co., Ltd., The . . . .	40 "
<b>COMPONENTS</b>	
Pye, Ltd. . . . .	60 "
<b>COMPRESSORS, DIESEL.</b>	
Ward, Thos. W., Ltd. . . . .	36 "
<b>COMPRESSORS, ELECTRIC.</b>	
British Thomson-Houston Co., Ltd., The . . . . .	21 "
Siebe, Gorman & Co., Ltd. . . . .	48 "
Ward, Thos. W., Ltd. . . . .	36 "

	Page.
<b>COMPRESSORS, STEAM.</b>	
British Thomson-Houston Co., Ltd., The . . . . .	21 adv.
<b>CONDENSER PLATES AND TUBES.</b>	
I.C.I. Metals, Ltd. . . . .	50 "
<b>CONDENSER TUBES.</b>	
Yorkshire Copper Works, Ltd. . . . .	20 "
<b>CONDENSING AND DISTILLING PLANTS.</b>	
Aiton & Co., Ltd. . . . .	39 "
Vickers-Armstrongs, Ltd. . . . .	51 & 52 "
<b>CORRUGATED EXPANSION PIPES.</b>	
Aiton & Co. Ltd. . . . .	39 "
<b>COVERS, AIRCRAFT EQUIPMENT.</b>	
R.F.D. Co., Ltd. . . . .	56 "
<b>CRANES, SHIPS.</b>	
Clarke, Chapman & Co., Ltd. . . . .	35 "
<b>CRANES, SHORE.</b>	
Babcock & Wilcox, Ltd. . . . .	57 "
Clarke, Chapman & Co., Ltd. . . . .	35 "
Kockums Mekaniska Verkstads A.B. (Sweden) . . . . .	9 "
Ward, Thos. W., Ltd. . . . .	36 "
<b>DE-SUPERHEATERS</b>	
Babcock & Wilcox, Ltd. . . . .	57 "
<b>DESTROYERS.</b>	
Brown, John, & Co., Ltd. . . . .	53 "
Cammell Laird & Co., Ltd. . . . .	34 "
Götaverken (Sweden) . . . . .	7 "
Hawthorn, Leslie, R. & W., & Co., Ltd. . . . .	32 "
Kockums Mekaniska Verstdads, A.B. (Sweden) . . . . .	9 "
Vickers-Armstrongs Ltd. . . . .	51 & 52 "
<b>DIESEL ENGINE CYLINDERS PORUS-KROME PLATED.</b>	
Van der Horst Corporation of America . . . . .	33 "
<b>DIESEL SPARE PARTS.</b>	
Korody Marine Corporation (U.S.A.) . . . . .	13 "
<b>DINGHIES.</b>	
Fairey Aviation Co., Ltd., The . . . .	42 "
R.F.D. Co., Ltd. . . . .	56 "
Saunders-Roe (Anglesey), Ltd. . . . .	27 "
Vosper Ltd. . . . .	24 "

	Page.
<b>DIVING APPARATUS.</b>	
Siebe, Gorman & Co., Ltd. . . . .	48 adv.
<b>DREDGES.</b>	
Ingalls Shipbuilding Corporation, The . . .	22 "
<b>DRY DOCK PROPRIETORS.</b>	
Cammell Laird & Co., Ltd. . . . .	34 "
Götaverken (Sweden) . . . . .	7 "
Kockums Mekaniska Verkstads, A.B. (Sweden) . . . . .	9 "
<b>ECONOMISERS.</b>	
Babcock & Wilcox, Ltd. . . . .	57 "
<b>ELECTRICAL AUXILIARIES.</b>	
British Thomson-Houston Co., Ltd., The . . . . .	21 "
Clarke, Chapman & Co., Ltd. . . . .	35 "
Electric Boat Division of General Dynamics Corporation . . . . .	23 "
<b>ELECTRICAL CABLE COMPOUND.</b>	
British Insulated Callender's Cables, Ltd. . . . .	12 "
<b>ELECTRICAL EQUIPMENT.</b>	
British Thomson-Houston Co., Ltd., The . . . . .	21 "
Clarke, Chapman & Co., Ltd. . . . .	35 "
McGeoch, William, & Co., Ltd. . . . .	43 "
Newton Brothers (Derby), Ltd. . . . .	29 "
Pye, Ltd. . . . .	60 "
Record Electrical Co., Ltd., The . . . .	48 "
Vosper Ltd. . . . .	24 "
Whipp & Bourne, Ltd. . . . .	31 "
<b>ELECTRICAL FITTINGS.</b>	
Clarke, Chapman & Co., Ltd. . . . .	35 "
McGeoch, Wm., & Co., Ltd. . . . .	43 "
Vosper Ltd. . . . .	24 "
<b>ELECTRICAL INSTALLATIONS AND REPAIRS</b>	
Vosper Ltd. . . . .	24 "
<b>ELECTRICAL MEASURING INSTRUMENTS.</b>	
Record Electrical Co., Ltd., The . . . .	48 "
<b>ELECTRICAL SWITCHGEAR.</b>	
Whipp & Bourne, Ltd. . . . .	31 "
<b>ELECTRO-HYDRAULIC AUXILIARIES.</b>	
Clarke, Chapman & Co., Ltd. . . . .	35 "
Hastie, John, & Co., Ltd. . . . .	6 "

	Page.
<b>ELECTRONIC EQUIPMENT.</b>	
British Thomson-Houston Co., Ltd., The . . . . .	21 adv.
Dansk Industri Syndikat . . . . .	43 "
Decca Radar Ltd., . . . . .	59 "
de Havilland Aircraft Co., Ltd., The . .	54 "
Korody Marine Corporation (U.S.A.) . . . . .	13 "
Newton Brothers (Derby), Ltd. . . . .	29 "
Philips' Telecommunicatie Industrie, N.V. . . . .	18 "
Pye, Ltd. . . . .	60 "
Sperry Gyroscope Co., Ltd., The . . . .	40 "
<b>ELECTROPLATING.</b>	
Van der Horst Corporation of America . . . . .	33 "
<b>EMERGENCY LIGHTING EQUIPMENT.</b>	
Clarke, Chapman & Co., Ltd. . . . .	35 "
Electro Dynamic Construction Co., Ltd. . . . .	23 "
<b>ENGINE DIRECTION INDICATORS.</b>	
Record Electrical Co., Ltd., The . . . .	48 "
<b>ENGINEERS' SMALL TOOLS.</b>	
Ward, Thos. W., Ltd. . . . .	36 "
<b>ENGINES, AIRCRAFT, JET, RECIPROCATING</b>	
de Havilland Aircraft Co., Ltd., The . .	54 "
Napier, D., & Son, Ltd. . . . .	16 "
<b>ENGINES, AUXILIARY.</b>	
Götaverken (Sweden) . . . . .	7 "
Harland & Wolff, Ltd. . . . .	30 "
Korody Marine Corporation (U.S.A.) . . . .	13 "
Thornycroft, John I., & Co. Ltd. . . . .	29 "
<b>ENGINES, INTERNAL COMBUSTION, PROPULSION.</b>	
Brown, John, & Co., Ltd. . . . .	53 "
Götaverken (Sweden) . . . . .	7 "
Harland & Wolff, Ltd. . . . .	30 "
Hawthorn, Leslie, R. & W., & Co., Ltd. . . . .	32 "
Kockums Mekaniska Verkstads, A.B. (Sweden) . . . . .	9 "
Korody Marine Corporation (U.S.A.) . . .	13 "
Napier, D., & Son, Ltd. . . . .	16 "
Nederlandsche Vereenigde Scheepsbouw Bureaux . . . . .	26 "
Thornycroft, John I., & Co., Ltd. . . . .	28 "
Vickers-Armstrongs, Ltd. . . . .	51 & 52 "
Vosper, Ltd. . . . .	24 "
White, J. Samuel, & Co., Ltd. . . . .	49 "



# CLASSIFIED LIST OF ADVERTISERS—continued.

	Page.
<b>ENGINES, STEAM PROPULSION.</b>	
Brown, John, & Co., Ltd. . . . .	53 adv.
Cammell Laird & Co., Ltd. . . . .	34 "
Götaverken (Sweden) . . . . .	7 "
Harland & Wolff, Ltd. . . . .	30 "
Hawthorn, Leslie, R. & W., & Co., Ltd. . . . .	32 "
Nederlandsche Vereenigde Scheepsbouw Bureaux . . . . .	26 "
Parsons Marine Steam Turbine Co., Ltd., The . . . . .	19 "
Thornycroft, John I., & Co., Ltd. . . . .	28 "
Vickers-Armstrongs, Ltd. . . . .	51 & 52 "
White, J. Samuel, & Co., Ltd. . . . .	49 "
Yarrow & Co., Ltd. . . . .	47 "
<b>ENGRAVING.</b>	
Vosper Ltd. . . . .	24 "
<b>ESCAPE APPARATUS, SUBMARINE.</b>	
Siebe, Gorman & Co., Ltd. . . . .	49 "
<b>EVAPORATOR DISTILLERS.</b>	
Aiton & Co., Ltd. . . . .	39 "
<b>EXPANSION JOINTS, BELLOWS TYPE.</b>	
Aiton & Co., Ltd. . . . .	39 "
<b>FILTERS.</b>	
Auto-Klean Strainers, Ltd. . . . .	49 "
<b>FIRE AND SALVAGE VESSELS.</b>	
Cammell Laird & Co., Ltd. . . . .	34 "
Korody Marine Corporation (U.S.A.) . . . . .	13 "
Saunders-Roe (Anglesey) Ltd. . . . .	27 "
Thornycroft, John I., & Co., Ltd. . . . .	28 "
Vosper Ltd. . . . .	24 "
White, J. Samuel, & Co., Ltd. . . . .	49 "
<b>FIRE CONTROL AND GUNNERY FITTINGS.</b>	
Barr & Stroud, Ltd. <i>Inside Front Cover</i> . . . . .	
Graham, Alfred, & Co., Ltd. . . . .	43 "
McGeoch, William, & Co., Ltd. . . . .	43 "
Sperry Gyroscope Co., Ltd., The . . . . .	40 "
Telephone Manufacturing Co., Ltd. . . . .	47 "
<b>FITTINGS, SHIP</b>	
Harland & Wolff, Ltd. . . . .	30 "
McGeoch, William, & Co., Ltd. . . . .	43 "
Vickers-Armstrongs Ltd. . . . .	51 & 52 "
Vosper Ltd. . . . .	24 "

	Page.
<b>FLASHPROOF CLOTHING.</b>	
R.F.D. Co., Ltd. . . . .	56 adv.
Siebe, Gorman & Co., Ltd. . . . .	49 "
<b>FLOTATION GEAR.</b>	
R.F.D. Co., Ltd. . . . .	56 "
<b>FREQUENCY CHANGERS.</b>	
Electro Dynamic Construction Co., Ltd. . . . .	23 "
<b>FURNITURE.</b>	
New Equipment, Ltd. . . . .	50 "
<b>FUSE AND JOINT BOXES.</b>	
British Insulated Callender's Cables, Ltd. . . . .	12 "
Graham, Alfred, & Co., Ltd. . . . .	43 "
McGeoch, William, & Co., Ltd. . . . .	43 "
Vickers-Armstrongs Ltd. . . . .	51 & 52 "
Vosper Ltd. . . . .	24 "
<b>GAS MASKS.</b>	
Siebe, Gorman & Co., Ltd. . . . .	48 "
<b>GAS TURBINES.</b>	
British Thomson-Houston Co., Ltd., The . . . . .	21 "
Götaverken (Sweden) . . . . .	7 "
<b>GEAR CASINGS.</b>	
Cammell Laird & Co., Ltd. . . . .	34 "
Harland & Wolff, Ltd. . . . .	30 "
Vickers-Armstrongs, Ltd. . . . .	51 & 52 "
<b>GEARING, TURBINE.</b>	
Brown, John, & Co., Ltd. . . . .	53 "
Cammell Laird & Co., Ltd. . . . .	34 "
Hawthorn, Leslie, R. & W., & Co., Ltd. . . . .	32 "
Parsons Marine Steam Turbine Co., Ltd., The . . . . .	19 "
Vickers-Armstrongs, Ltd. . . . .	51 & 52 "
<b>GEARS AND GEARING.</b>	
British Thomson-Houston Co., Ltd., The . . . . .	21 "
Cammell Laird & Co., Ltd. . . . .	34 "
Vickers-Armstrongs, Ltd. . . . .	51 & 52 "
<b>GENERATORS, ELECTRIC.</b>	
British Thomson-Houston Co., Ltd., The . . . . .	21 "
Clarke, Chapman & Co., Ltd. . . . .	35 "
Electric Boat Division of General Dynamics Corporation . . . . .	4 "
Electro Dynamic Construction Co., Ltd. . . . .	23 "
Newton Brothers (Derby), Ltd. . . . .	29 "
Record Electrical Co., Ltd., The . . . . .	48 "

	Page.
<b>GOVERNORS, ENGINE SPEED.</b>	
Iso-Speedic Co., Ltd., The . . . . .	2 adv.
<b>GUN BARRELS, CHROMIUM PLATED.</b>	
Van der Horst Corporation of America . . . . .	33 "
<b>GUNNERY TRAINING EQUIPMENT.</b>	
R.F.D. Co., Ltd. . . . .	56 "
Vickers-Armstrongs Ltd. . . . .	51 & 52 "
<b>GUNS AND MOUNTINGS.</b>	
Dansk Industri Syndikat (Denmark) . . . . .	43 "
Vickers-Armstrongs, Ltd. . . . .	51 & 52 "
<b>GUN-SIGHTING APPARATUS AND HEIGHT FINDERS.</b>	
Barr & Stroud, Ltd. <i>Inside Front Cover</i> . . . . .	
Sperry Gyroscope Co., Ltd., The . . . . .	40 "
Vickers-Armstrongs, Ltd. . . . .	51 & 52 "
<b>GYRO COMPASSES.</b>	
Brown, S. G., Ltd. . . . .	45 "
Sperry Gyroscope Co., Ltd., The . . . . .	40 "
<b>HELM INDICATORS.</b>	
Brown, S. G., Ltd., . . . . .	45 "
Sperry Gyroscope Co., Ltd., The . . . . .	40 "
<b>HIGH FREQUENCY MOTORS AND ALTERNATORS.</b>	
Electro Dynamic Construction Co., Ltd. . . . .	23 "
<b>HYDRAULIC PLANT.</b>	
Hastie, John, & Co., Ltd. . . . .	6 "
MacTaggart, Scott & Co., Ltd. . . . .	44 "
Vickers-Armstrongs, Ltd. . . . .	51 & 52 "
<b>INDICATORS, ELECTRIC.</b>	
McGeoch, William, & Co., Ltd. . . . .	43 "
<b>INDICATORS, NAVIGATION LIGHTS.</b>	
McGeoch, William, & Co., Ltd. . . . .	43 "
<b>INGOT METALS, NON-FERROUS.</b>	
Birkett, T. M., & Sons, Ltd. . . . .	42 "

	Page.
<b>INSTRUMENTS, ELECTRONIC.</b>	
Pye, Ltd. . . . .	60 adv.
<b>INSTRUMENTS, NAUTICAL.</b>	
Barr & Stroud, Ltd. <i>Inside Front Cover</i> . . . . .	
Brown, S. G., Ltd. . . . .	45 "
Graham, Alfred, & Co., Ltd. . . . .	43 "
Sperry Gyroscope Co., Ltd., The . . . . .	40 "
<b>INSTRUMENTS, NAVIGATION.</b>	
Pye, Ltd. . . . .	60 "
<b>INSTRUMENTS, PRECISION.</b>	
Pye, Ltd. . . . .	60 "
<b>INSULATION RESISTANCE TESTERS.</b>	
Record Electrical Co., Ltd., The . . . . .	43 "
<b>INSTRUMENTS, TEST EQUIPMENT.</b>	
Pye, Ltd. . . . .	60 "
<b>JOINTING RINGS.</b>	
Metallic Valve Co., Ltd., The . . . . .	46 "
<b>LAMP HOLDERS.</b>	
McGeoch, William, & Co., Ltd. . . . .	43 "
<b>LIFE RAFTS.</b>	
R.F.D. Co., Ltd. . . . .	55 "
<b>LIFE-SAVING EQUIPMENT.</b>	
R.F.D. Co., Ltd. . . . .	56 "
Siebe, Gorman & Co., Ltd. . . . .	48 "
<b>LIFE-SAVING JACKETS.</b>	
R.F.D. Co., Ltd. . . . .	56 "
<b>LINE TELEPHONY EQUIPMENT.</b>	
Philip's Telecommunicatie Industrie N.V. . . . .	18 "
<b>LOUD HAILERS.</b>	
Telephone Manufacturing Co., Ltd. . . . .	47 "
<b>LOUDSPEAKER EQUIPMENT.</b>	
British Thomson-Houston Co., Ltd., The . . . . .	21 "
Korody Marine Corporation (U.S.A.) . . . . .	13 "
Telephone Manufacturing Co., Ltd. . . . .	47 "
<b>MACHINE CANNON.</b>	
Dansk Industri Syndikat (Denmark) . . . . .	43 "
<b>MACHINE GUNS.</b>	
Dansk Industri Syndikat (Denmark) . . . . .	43 "
<b>MACHINED PARTS, FERROUS.</b>	
Vosper Ltd. . . . .	24 "
<b>MACHINED PARTS, NON-FERROUS.</b>	
Birket, T. M., & Sons, Ltd. . . . .	42 "
McGeoch, William, & Co., Ltd. . . . .	43 "
Vickers-Armstrongs Ltd. . . . .	51 & 52 "
Vosper Ltd. . . . .	24 "





## In the Royal Yacht ...

Large quantities of BICC Ship Wiring Cables were employed by John Brown & Co. Ltd. of Clydebank, the builders, in the Royal Yacht "Britannia."

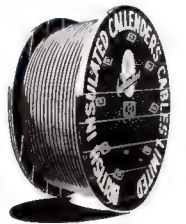
BICC manufacture cables and conductors for all normal requirements aboard ship, satisfying fully all relevant clauses in Lloyd's Register of Shipping Rules for Electrical Equipment, or other recognised specifications.

Further information on BICC Ship Wiring Cables is contained in Publication No. 306, available on request.

**BICC**

**CABLES**

*for Shipwiring and  
Auxiliary Services*



**BRITISH INSULATED CALLENDER'S CABLES LIMITED**  
21 Bloomsbury Street, London, W.C.1 MUSEum 1600



# K

*orody Marine Corporation*

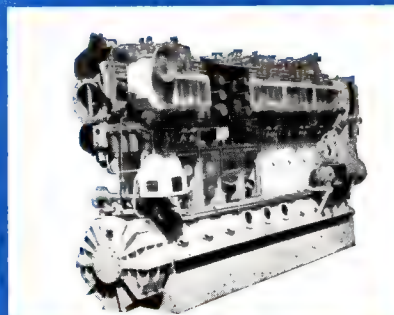
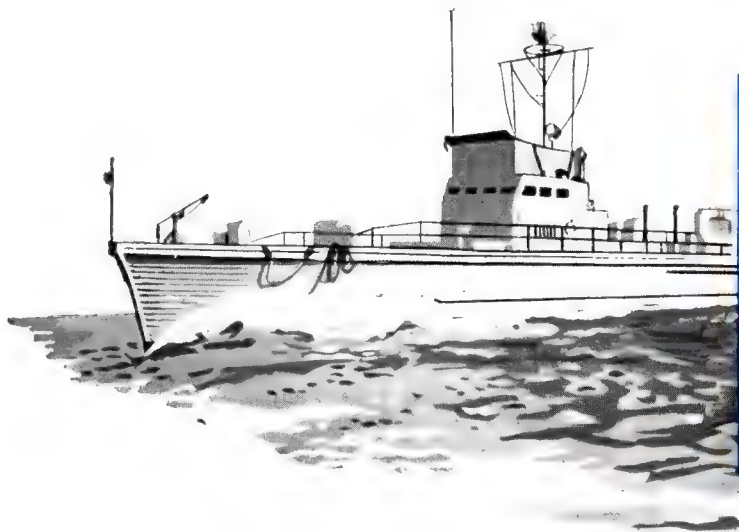
*serves every part*

*of the World*

**SHIPBUILDING AND CONVERSIONS**

**DIESEL ENGINES AND REPLACEMENT PARTS**

**ELECTRONIC SUPPLY SERVICE**



The Korody Marine Corporation takes pride in offering a complete procurement and maintenance service for United States built naval vessels. Your choice of the Korody Marine Corporation makes it possible for you to deal with one firm from design to outfitting, for vessels from launches to patrol craft up to 1,000 tons. The Corporation also specializes in the conversion of river, harbor, and coastal vessels in U.S.A. and affiliated European shipyards, and the recommissioning of former U.S. Government vessels for active naval duty.

The Korody Marine Corporation is a prime manufacturer of heavy-duty, medium speed, 90 to 500 HP diesels for marine and generating units. Factory parts and personnel insure complete satisfaction in the full rebuilding of all makes of diesels to meet original manufacturer's specifications.

**Supply Center for :**

- Replacement parts for practically all types of American diesel and gasoline engines.
- Aircraft and engines.
- Air frame parts and accessories.
- Modern electronic systems and system projections.

**KORODY MARINE CORPORATION**

**12822 SIMMS AVE., HAWTHORNE, CALIFORNIA, U.S.A.**

**CABLE: PAKORODY, HAWTHORNE, CALIFORNIA**



# CLASSIFIED LIST OF ADVERTISERS—continued.

	Page.
<b>MARINE RADAR.</b>	
British Thomson-Houston Co., Ltd., The .. .. .	21 adv.
Decca Radar Ltd., .. .. .	59 "

<b>MATHEMATICAL INSTRUMENTS.</b>	
Barr & Stroud, Ltd. <i>Inside Front Cover</i> ..	

<b>METALLIC AND ENGINE FITTINGS.</b>	
McGeoch, William, & Co., Ltd. ..	43 "
Metallic Valve Co., Ltd., The ..	46 "

<b>METERS, WATER, STEAM AND OIL.</b>	
Babcock & Wilcox, Ltd. .. ..	57 "
Kent, George, Ltd. .. ..	41 "

<b>MICROPHONE EQUIPMENT.</b>	
Telephone Manufacturing Co., Ltd. ..	47 "

<b>MODEL MAKERS.</b>	
Bassett-Lowke, Ltd. .. ..	45 "

<b>MORTARS.</b>	
Dansk Industri Syndikat (Denmark) ..	43 "

<b>MOTORS, ELECTRIC.</b>	
British Thomson-Houston Co., Ltd., The .. .. .	21 "
Clarke, Chapman & Co., Ltd. ..	35 "
Electro Dynamic Construction Co., Ltd. .. .. .	23 "
Harland & Wolff Ltd. .. ..	30 "
Newton Brothers (Derby), Ltd. ..	29 "
Ward, Thos. W., Ltd. .. ..	36 "

<b>NAVIGATION LAMPS.</b>	
McGeoch, William, & Co., Ltd. ..	43 "

<b>OFFSHORE DRILLING EQUIPMENT.</b>	
Ingalls Shipbuilding Corporation, The ..	22 "

<b>OIL FUEL SYSTEMS AND BURNERS.</b>	
Babcock & Wilcox, Ltd. .. ..	57 "
Thornycroft, John I., & Co., Ltd. ..	28 "
White, J. Samuel, & Co., Ltd. ..	49 "
Yarrow & Co., Ltd. .. ..	47 "

<b>OPTICAL INSTRUMENTS.</b>	
Ottway, W., & Co., Ltd. .. ..	44 "

<b>ORDNANCE.</b>	
Aktiebolaget Bofors .. ..	38 "
Vickers-Armstrongs, Ltd. ..	51 & 52 "

<b>OXYGEN APPARATUS.</b>	
Siebe, Gorman & Co., Ltd. ..	48 "

<b>PACKINGS AND JOINTINGS.</b>	
Beldam Asbestos Co., Ltd. .. ..	45 "

	Page.
<b>PAINT AND COMPOSITIONS.</b>	
International Paints, Ltd. <i>Inside Back Cover</i> adv.	
Red Hand Compositions Co. (The) ..	55 "

<b>PARAVANES.</b>	
Vosper Ltd. .. ..	24 "

<b>PASSENGER AND CARGO SHIPS.</b>	
Bethlehem Steel Company (U.S.A.) ..	37 "
Brown, John, & Co., Ltd. .. ..	53 "
Cammell Laird & Co., Ltd. .. ..	34 "
Götaverken (Sweden) .. ..	7 "
Harland & Wolff, Ltd. .. ..	30 "
Hawthorn, Leslie, R. & W., & Co., Ltd. .. .. .	32 "
Ingalls Shipbuilding Corporation, The ..	22 "
Kockums Mekaniska Verkstads, A.B. ..	9 "
Korody Marine Corporation (U.S.A.) .. .. .	13 "
Thornycroft, John I., & Co., Ltd. ..	28 "
Vickers-Armstrongs, Ltd. ..	51 & 52 "
Vosper Ltd. .. ..	24 "
White, J. Samuel, & Co., Ltd. ..	49 "
Yarrow & Co., Ltd. .. ..	47 "

<b>PATROL BOATS, LAUNCHES, TENDERS AND PINNACES.</b>	
Harland & Wolff, Ltd. .. ..	30 "
Korody Marine Corporation (U.S.A.) .. .. .	13 "
Saunders-Roe (Anglesey), Ltd. ..	27 "
Thornycroft, John I., & Co., Ltd. ..	28 "
Vosper, Ltd. .. ..	24 "
Yarrow & Co., Ltd. .. ..	47 "

<b>PERISCOPES.</b>	
Barr & Stroud, Ltd. <i>Inside Front Cover</i> ..	

<b>PIPE FITTING.</b>	
Yorkshire Copper Works Ltd., The ..	20 "

<b>PIPES, CAST IRON.</b>	
Aiton & Co., Ltd. .. ..	39 "
Ward, Thos. W., Ltd. .. ..	36 "

<b>PIPES, COPPER AND BRASS.</b>	
I.C.I. (Metals) Ltd. .. ..	50 "
Yorkshire Copper Works, Ltd., The ..	20 "

	Page.
<b>PIPES, JACKETED.</b>	
Vosper Ltd. .. ..	24 adv.

<b>PIPES, SEA WATER.</b>	
I.C.I. (Metals) Ltd. .. ..	50 "
Yorkshire Copper Works, Ltd., The ..	20 "

<b>PIPES, STEEL, WELDED AND WELDLESS.</b>	
Aiton & Co., Ltd. .. ..	39 "
Ward, Thos. W., Ltd. .. ..	36 "

<b>PISTONS, PISTON RINGS AND GUDGEON PINS.</b>	
Harland & Wolff, Ltd. .. ..	30 "

<b>PLUGS AND SOCKETS.</b>	
McGeoch, William, & Co., Ltd. ..	43 "
Pye, Ltd. .. ..	60 "

<b>PRESSURE VESSELS.</b>	
Babcock & Wilcox, Ltd. .. ..	57 "
Brown, John, & Co., Ltd. .. ..	53 "
Ingalls Shipbuilding Corporation, The ..	22 "

<b>PROJECTILES.</b>	
Aktiebolaget Bofors .. ..	38 "

<b>PROPELLERS.</b>	
Birkett, T. M., & Sons, Ltd. ..	42 "
Harland & Wolff, Ltd. .. ..	30 "
Thornycroft, John I., & Co., Ltd. ..	28 "
Vosper Ltd. .. ..	24 "

<b>PROPELLERS, AIRCRAFT.</b>	
de Havilland Aircraft Co., Ltd., The ..	54 "
Fairey Aviation Co., Ltd., The ..	42 "

<b>PROPULSION, ELECTRIC.</b>	
British Thomson-Houston Co., Ltd., The .. .. .	21 "
Harland & Wolff, Ltd. .. ..	30 "

<b>PROTECTIVE CLOTHING.</b>	
R.F.D. Co., Ltd. .. ..	56 "
Siebe, Gorman & Co., Ltd. .. ..	48 "
Ward, Thos. W., Ltd. .. ..	36 "

<b>PUBLISHERS.</b>	
McGraw-Hill Book Co., Inc. ..	41 & 46 "
Sampson Low, Marston & Co., Ltd. ..	41 & 46 "

	Page.
<b>PUMPS.</b>	
Clarke, Chapman & Co., Ltd. ..	35 adv.
Hastie, John, & Co., Ltd. .. ..	6 "
MacTaggart, Scott & Co., Ltd. ..	44 "
Siebe, Gorman & Co., Ltd. .. ..	48 "
Vickers-Armstrongs, Ltd. ..	51 & 52 "
Ward, Thos. W., Ltd. .. ..	36 "

<b>PUMPS, CIRCULATING.</b>	
Clarke, Chapman & Co., Ltd. ..	35 "
Vickers-Armstrongs, Ltd. ..	51 & 52 "
Vosper Ltd. .. ..	24 "

<b>RADAR FOR FIRE CONTROL.</b>	
Philips' Telecommunicatie Industrie, N.V. .. .. .	18 "
Sperry Gyroscope Co., Ltd., The ..	40 "
Vickers-Armstrongs Ltd. ..	51 & 52 "

<b>RADAR FOR HARBOUR SUPERVISION.</b>	
Decca Radar Ltd. .. ..	59 "
Philips' Telecommunicatie Industrie, N.V. .. .. .	18 "
Sperry Gyroscope Co., Ltd., The ..	40 "
Vickers-Armstrongs, Ltd. ..	51 & 52 "

<b>RADAR, FOR NAVIGATION, WARNING, INTERCEPTION.</b>	
Decca Radar Ltd. .. ..	59 "
Philips' Telecommunicatie Industrie, N.V. .. .. .	18 "

<b>RADIO, AIR.</b>	
Marconi's Wireless Telegraph Co., Ltd. .. .. .	25 "

<b>RADIO EQUIPMENT.</b>	
Pye, Ltd. .. ..	60 "

<b>RADIO, MARINE.</b>	
Korody Marine Corporation (U.S.A.) .. .. .	13 "
Marconi's Wireless Telegraph Co., Ltd. .. .. .	25 "
Philips' Telecommunicatie Industrie, N.V. .. .. .	18 "

<b>RAFTS.</b>	
R.F.D. Co., Ltd. .. ..	56 "

# CLASSIFIED LIST OF ADVERTISERS—continued.

	Page.
<b>RAILS AND RAIL TRACK ACCESSORIES.</b>	
Ward, Thos. W., Ltd. . . . .	36 adv.

<b>RANGE FINDERS.</b>	
Barr & Stroud, Ltd. <i>Inside Front Cover</i> ..	

<b>REMOTE CONTROLS.</b>	
British Thomson-Houston Co., Ltd., The .. . . .	21 "

<b>RESPIRATORS, ANTI-GAS.</b>	
Siebe, Gorman & Co., Ltd. . . . .	48 "

<b>REVERSE REDUCTION GEARS, OIL OPERATED</b>	
Harland & Wolff, Ltd. . . . .	30 "

<b>REVERSING ENGINES, STEAM AND AIR OPERATED.</b>	
MacTaggart, Scott & Co., Ltd. . . . .	44 "

<b>REVOLUTION INDICATORS.</b>	
British Thomson-Houston Co., Ltd., The .. . . .	21 "
Record Electrical Co., Ltd., The .. . . .	48 "

<b>RODS AND TUBES, CHILL CAST.</b>	
Birkett, T. M., & Sons, Ltd. . . . .	42 "

<b>ROTARY CONVERTERS.</b>	
British Thomson-Houston Co., Ltd., The .. . . .	21 "
Electro Dynamic Construction Co., Ltd. . . . .	23 "
Korody Marine Corporation (U.S.A.) . . . . .	13 "
Newton Brothers (Derby), Ltd. . . . .	29 "

<b>SALVAGE EQUIPMENT.</b>	
Siebe, Gorman & Co., Ltd. . . . .	43 "

<b>SCIENTIFIC INSTRUMENTS.</b>	
Brown, S. G., Ltd. . . . .	45 "
Decca Radar Ltd. . . . .	59 "
Ottway, W., & Co., Ltd. . . . .	44 "
Pye, Ltd. . . . .	60 "
Siebe, Gorman & Co., Ltd. . . . .	48 "
Sperry Gyroscope Co., Ltd., The .. . . .	40 "

	Page.
<b>SCREENS, CLEAR VIEW.</b>	
Kent, George, Ltd. . . . .	41 adv.

<b>SEARCHLIGHTS.</b>	
Clarke, Chapman & Co., Ltd. . . . .	35 "
London Electric Firm, Ltd. . . . .	39 "
McGeoch, William, & Co., Ltd. . . . .	43 "

<b>SHEETS, COPPER AND BRASS.</b>	
British Insulated Callender's Cables, Ltd. . . . .	12 "
I.C.I. Metals, Ltd. . . . .	50 "

<b>SHIP BREAKERS.</b>	
Ward, Thos. W., Ltd. . . . .	36 "

<b>SHIP BUILDERS AND SHIP REPAIRERS.</b>	
(See also Warships, Torpedo Craft Builders, Submarines, Passenger and Cargo Ships, Patrol Boats, Launches, Tenders and Pinnaces, Fire and Salvage Boats.)	

Bethlehem Steel Company (U.S.A.)	37 "
Brown, John, & Co., Ltd. . . . .	53 "
Cammell Laird & Co., Ltd. . . . .	34 "
Götaverken (Sweden) . . . . .	7 "
Harland & Wolff, Ltd. . . . .	30 "
Hawthorn, Leslie, R. & W., & Co., Ltd. . . . .	32 "
Ingalls Shipbuilding Corporation, The .. . . .	22 "
Kockums Mekaniska Verkstads, A. B. . . . .	9 "
Nederlandsche Vereenigde Scheepsbouw Bureaux . . . . .	26 "
Saunders-Roe (Anglesey), Ltd. . . . .	27 "
Thornycroft, John I., & Co., Ltd. . . . .	28 "
Vickers-Armstrongs, Ltd. . . . .	51 & 52 "
Vosper, Ltd. . . . .	24 "
White, J. Samuel, & Co., Ltd. . . . .	49 "
Yarrow & Co., Ltd. . . . .	47 "

<b>SHIP MACHINERY.</b>	
Brown, John, & Co., Ltd. . . . .	53 "
Cammell Laird & Co., Ltd. . . . .	34 "
Clarke, Chapman & Co., Ltd. . . . .	35 "
Götaverken (Sweden) . . . . .	7 "
Harland & Wolff, Ltd. . . . .	30 "
Hawthorn, Leslie, R. & W., & Co., Ltd. . . . .	32 "
Vickers-Armstrongs, Ltd. . . . .	51 & 52 "
Ward, Thos. W., Ltd. . . . .	36 "

<b>SHIP'S FURNITURE</b>	
New Equipment, Ltd. . . . .	50 "

	Page.
<b>SHIPYARD MACHINERY AND PLANT.</b>	
Ward, Thos. W., Ltd. . . . .	36 adv.

<b>SIGNALLING SYSTEMS AND APPARATUS.</b>	
Graham, Alfred, & Co., Ltd. . . . .	43 "
Kockums Mekaniska Verkstads, A. B. . . . .	9 "
McGeoch, William, & Co., Ltd. . . . .	43 "
Telephone Manufacturing Co., Ltd. . . . .	47 "

<b>SLEEVE TARGETS.</b>	
R.F.D. Co., Ltd. . . . .	56 "

<b>SMOKE HELMETS.</b>	
Siebe, Gorman & Co., Ltd. . . . .	48 "

<b>SOCKETS AND PLUGS, ELECTRIC, WATERTIGHT.</b>	
McGeoch, William, & Co., Ltd. . . . .	43 "

<b>SOOT BLOWERS.</b>	
Babcock & Wilcox, Ltd. . . . .	57 "

<b>SPEED BOATS.</b>	
Thornycroft, John I., & Co., Ltd. . . . .	28 "
Vosper, Ltd. . . . .	24 "
White, J. Samuel, & Co., Ltd. . . . .	49 "
Yarrow & Co., Ltd. . . . .	47 "

<b>SPEED INDICATORS.</b>	
British Thomson-Houston Co., Ltd., The .. . . .	21 "
Record Electrical Co., Ltd., The .. . . .	48 "

<b>STEERING CONTROL GEAR, AUTOMATIC.</b>	
Brown, S. G., Ltd., . . . . .	45 "
MacTaggart, Scott & Co., Ltd. . . . .	44 "
Sperry Gyroscope Co., Ltd., The .. . . .	40 "

<b>STEAM SEPARATORS.</b>	
Aiton & Co., Ltd. . . . .	39 "
Babcock & Wilcox, Ltd. . . . .	57 "

<b>STEAM TRAPS.</b>	
Aiton & Co., Ltd. . . . .	39 "
Babcock & Wilcox, Ltd. . . . .	57 "

<b>STEEL, ALLOY AND SPECIAL.</b>	
Aktiebolaget Bofors . . . . .	38 "
Ward, Thos. W., Ltd. . . . .	36 "

<b>STEEL, FORGINGS, PLATES AND SECTIONS STAMPINGS.</b>	
Aktiebolaget Bofors . . . . .	38 "
Bethlehem Steel Company (U.S.A.) . . . . .	37 "

	Page.
<b>STEEL FURNITURE.</b>	
New Equipment, Ltd. . . . .	50 adv.

<b>STEEL, HIGH-SPEED TOOLS.</b>	
Aktiebolaget Bofors . . . . .	33 "

<b>STEEL, MANGANESE, WEAR RESISTING.</b>	
Aktiebolaget Bofors . . . . .	38 "

<b>STEERING GEAR.</b>	
Harland & Wolff, Ltd. . . . .	30 "
Hastie, John, & Co., Ltd. . . . .	6 "

<b>STRAINERS AND FILTERS.</b>	
Auto-Klean Strainers, Ltd. . . . .	49 "

<b>STUD BOLTS FOR HIGH PRESSURE WORK.</b>	
Aiton & Co., Ltd. . . . .	37 "

<b>SUB-MACHINE GUNS.</b>	
Dansk Industri Syndikat (Denmark) . . . . .	43 "

<b>SUBMARINES.</b>	
Bethlehem Steel Company (U.S.A.)	37 "
Cammell Laird & Co., Ltd. . . . .	34 "
Electric Boat Division of General Dynamics Corporation . . . . .	4 "
Kockums Mekaniska Verkstads, A. B. . . . .	9 "
Nederlandsche Vereenigde Scheepsbouw Bureaux . . . . .	26 "
Vickers-Armstrongs, Ltd. . . . .	51 & 52 "

<b>SUBMARINE PERISCOPES.</b>	
Barr & Stroud, Ltd. <i>Inside Front Cover</i> ..	

<b>SUITS, SURVIVAL.</b>	
R.F.D. Co., Ltd. . . . .	56 "

<b>SUPERHEATERS.</b>	
Babcock & Wilcox, Ltd. . . . .	57 "
Yarrow & Co., Ltd. . . . .	47 "

<b>SURFACE COATINGS FOR MARINE USE.</b>	
Red Hand Compositions Co. The .. . . .	55 "

<b>SURVIVAL EQUIPMENT.</b>	
R.F.D. Co., Ltd. . . . .	56 "

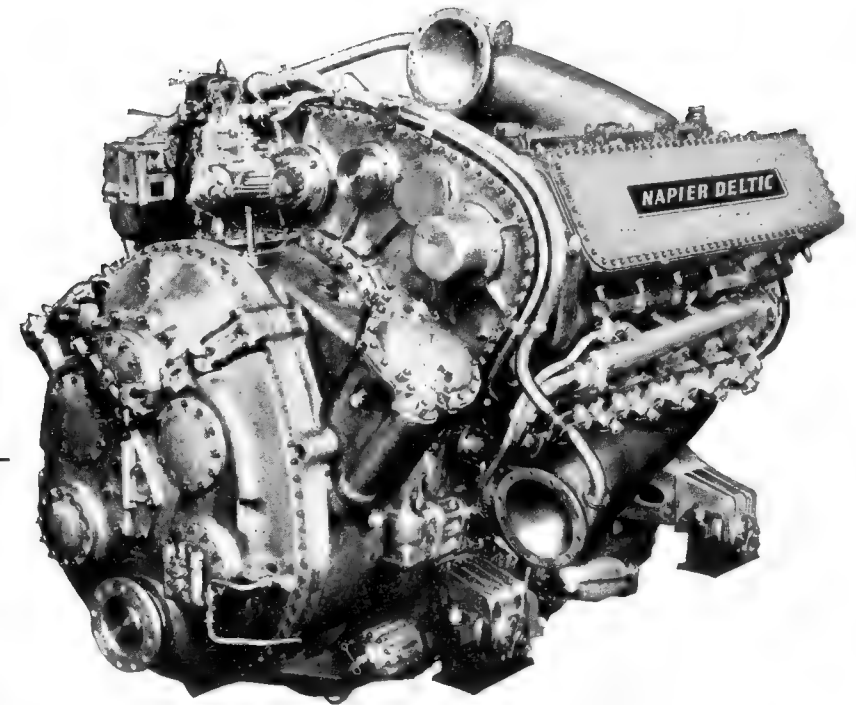
<b>SWITCHBOARDS.</b>	
Vosper Ltd. . . . .	24 "

<b>SWITCHBOARDS AND SWITCHGEAR.</b>	
British Thomson-Houston Co., Ltd., The .. . . .	21 "
Clarke, Chapman & Co., Ltd. . . . .	35 "
Electro Dynamic Construction Co., Ltd. . . . .	23 "
Graham, Alfred, & Co., Ltd. . . . .	43 "
Harland & Wolff, Ltd. . . . .	30 "
McGeoch, William, & Co., Ltd. . . . .	43 "
Whipp & Bourne, Ltd. . . . .	31 "

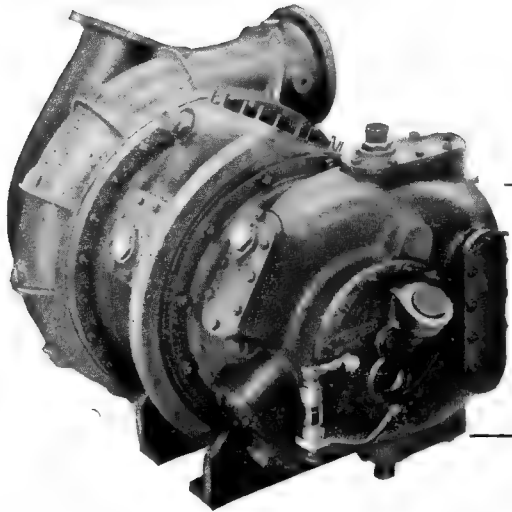


# ***Deltic***

*The 2,500 b.h.p. DELTIC, the most compact marine diesel of such power, is in series production for some of the Navy's fastest ships. Other versions of the Deltic are available for main and auxiliary machinery of merchant ships.*



# ***NAPIER***



*Afloat and ashore, in naval and mercantile installations, Napier turbo-blowers are at work converting waste exhaust energy into power gains of 60% to 100% or more without loss of reliability, with improved specific consumption.*

## ***turbo-blowers***

D. NAPIER AND SON LIMITED · LONDON · W. 3

# CLASSIFIED LIST OF ADVERTISERS—continued.

	Page.
<b>TACHOMETERS.</b>	
British Thomson-Houston Co., Ltd., The .. .. .	21 adv.
Record Electrical Co., Ltd., The ..	48 "
<b>TANKS, OIL AND WATER STORAGE.</b>	
Ingalls Shipbuilding Corporation, The	22 "
Vosper, Ltd. .. .. .	24 "
Ward, Thos. W., Ltd. .. .. .	35 "
<b>TELECOMMUNICATION EQUIPMENT.</b>	
Philips' Telecommunicatie Industrie, N.V. .. .. .	18 "
<b>TELEGRAPH SYSTEMS.</b>	
Graham, Alfred, & Co., Ltd. ..	43 "
<b>TELEMOTEURS.</b>	
Hastie, John, & Co., Ltd. .. ..	6 "
MacTaggart, Scott & Co., Ltd. ..	44 "
Vickers-Armstrongs, Ltd. ..	51 & 52 "
<b>TELEPHONE FITTINGS.</b>	
Telephone Manufacturing Co., Ltd	47 "
<b>TELEPHONES, BATTERYLESS.</b>	
Telephone Manufacturing Co., Ltd.	47 "
<b>TELEPHONES, LOUD SPEAKING.</b>	
Graham, Alfred, & Co., Ltd. ..	43 "
Korody Marine Corporation (U.S.A.) .. .. .	13 "
Telephone Manufacturing Co., Ltd.	47 "
<b>TENDERS FOR MARINE AIRCRAFT.</b>	
Saunders-Roe (Anglesey), Ltd. ..	27 "
Vosper Ltd. .. .. .	24 "
<b>TOOLS, MACHINE.</b>	
Ward, Thos. W., Ltd. .. .. .	36 "
<b>TORPEDO AND TORPEDO TUBES.</b>	
Nederlandsche Vereenigde Scheepsbouw Bureaux .. .. .	26 "
Saunders-Roe (Anglesey), Ltd. ..	27 "
Vickers-Armstrongs, Ltd. ..	51 & 52 "
<b>TORPEDO CRAFT BUILDERS.</b>	
Bethlehem Steel Company (U.S.A.)	37 "
Brown, John, & Co., Ltd. .. ..	53 "
Cammell Laird & Co., Ltd. .. ..	34 "
Electric Boat Division of General Dynamics Corporation .. .. .	4 "
Götaverken (Sweden) .. .. .	7 "
Kockums Mekaniska Verkstads, A. B.	9 "
Saunders-Roe (Anglesey), Ltd. ..	27 "
Thornycroft, John I., & Co., Ltd. ..	28 "
Vosper Ltd. .. .. .	24 "
White, J. Samuel, & Co., Ltd. ..	49 "

	Page.
<b>TORPEDO ORDER AND DEFLECTION CONTROL.</b>	
Barr & Stroud, Ltd., <i>Inside Front Cover</i> adv.	
Graham, Alfred, & Co., Ltd. ..	43 "
<b>TOWBOATS.</b>	
Ingalls Shipbuilding Corporation, The	22 "
<b>TOWED TARGETS.</b>	
R.F.D. Co., Ltd. .. .. .	56 "
Vosper, Ltd. .. .. .	24 "
<b>TOWED WINGED TARGETS.</b>	
R.F.D. Co., Ltd. .. .. .	56 "
<b>TREADPLATE, ALUMINIUM ALLOY.</b>	
I.C.I. Ltd. (Metals Division) ..	50 "
<b>TUBE FITTINGS.</b>	
Yorkshire Copper Works, Ltd., The	20 "
<b>TUBE JOINT FITTINGS, BRASS AND GUN METAL.</b>	
I.C.I. Ltd. (Metals Division) ..	50 "
<b>TUBES, BOILERS, ALUMINIUM, BRASS, CUPRO-NICKEL, COPPER AND CONDENSER.</b>	
Babcock & Wilcox, Ltd. .. ..	57 "
I.C.I. (Metals) Ltd. .. .. .	50 "
Yorkshire Copper Works, Ltd., The	20 "
<b>TUBES, NON-FERROUS.</b>	
Yorkshire Copper Works, Ltd., The	20 "
<b>TUBULAR STEEL FURNITURE.</b>	
New Equipment, Ltd. .. .. .	50 "
<b>TURBINES.</b>	
British Thomson-Houston Co., Ltd., The .. .. .	21 "
Brown, John, & Co., Ltd. .. ..	53 "
Cammell Laird & Co., Ltd. .. ..	34 "
Götaverken (Sweden) .. .. .	7 "
Harland & Wolff, Ltd. .. .. .	30 "
Hawthorn, Leslie, R. & W., & Co., Ltd. .. .. .	32 "
Nederlandsche Vereenigde Scheepsbouw Bureaux .. .. .	26 "
Thornycroft, John I., & Co., Ltd. ..	28 "
Vickers-Armstrongs, Ltd. ..	51 & 52 "
White, J. Samuel, & Co., Ltd. ..	49 "
Yarrow & Co., Ltd. .. .. .	47 "

	Page.
<b>TURBINE GEARS.</b>	
British Thomson-Houston Co., Ltd., The .. .. .	21 adv.
Brown, John, & Co., Ltd. .. ..	53 "
Cammell Laird & Co., Ltd. .. ..	34 "
Götaverken (Sweden) .. .. .	7 "
Hawthorn, Leslie, R. & W., & Co., Ltd. .. .. .	32 "
Parsons Marine Steam Turbine Co., Ltd., The .. .. .	19 "
Vickers-Armstrongs, Ltd. ..	51 & 52 "
<b>TURBINES, EXHAUST.</b>	
British-Thomson Houston Co., Ltd., The .. .. .	21 "
Götaverken (Sweden) .. .. .	7 "
<b>TURBINES, JET AIRCRAFT.</b>	
de Havilland Aircraft Co., Ltd., The	51 "
Napier, D., & Son, Ltd. .. .. .	16 "
<b>TURBINES, STEAM, MARINE.</b>	
British Thomson-Houston Co., Ltd. The .. .. .	21 "
Brown, John, & Co., Ltd. .. ..	53 "
Cammell Laird & Co., Ltd., ..	34 "
Hawthorn, Leslie, R. & W., & Co., Ltd. .. .. .	32 "
Parsons Marine Steam Turbine Co., Ltd., The .. .. .	19 "
Vickers-Armstrongs, Ltd. ..	51 & 52 "
<b>TURBO BLOWERS.</b>	
British Thomson-Houston Co., Ltd., The .. .. .	21 "
Napier, D., & Son, Ltd. .. .. .	16 "
<b>UNDERWATER CAMERAS.</b>	
Siebe, Gorman & Co., Ltd. .. ..	43 "
<b>UNDERWATER TELEVISION EQUIPMENT.</b>	
Siebe, Gorman & Co., Ltd. .. ..	48 "
<b>VALVES AND COCKS.</b>	
Babcock & Wilcox, Ltd. .. ..	57 "
Birkett, T. M., & Sons, Ltd. ..	42 "
Cockburns, Ltd. .. .. .	45 "
Metallic Valve Co., Ltd., The ..	46 "
Vickers-Armstrongs, Ltd. ..	51 & 52 "
Ward, Thos. W., Ltd. .. .. .	36 "
<b>VALVES AND MINIATURE RELAYS.</b>	
Pye, Ltd. .. .. .	60 "

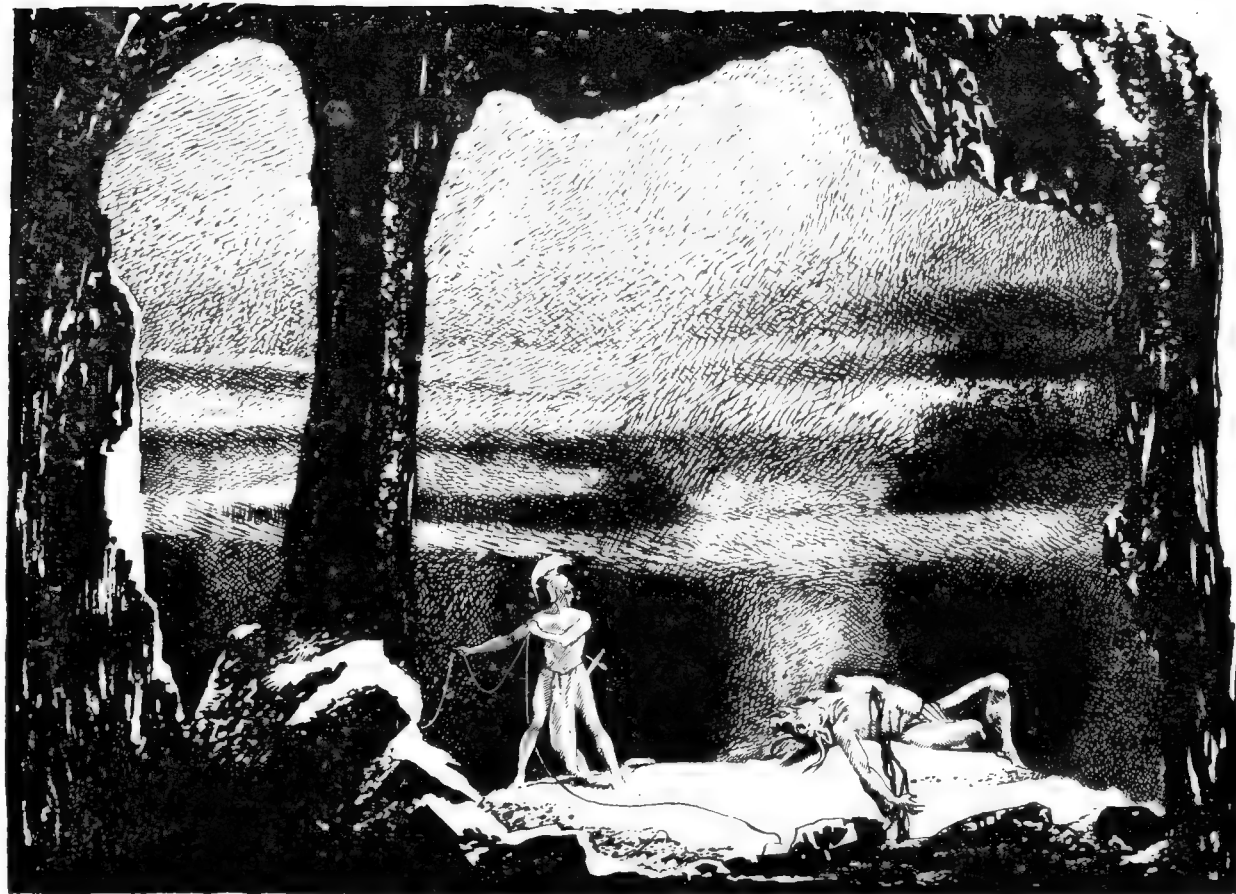
	Page.
<b>VENTILATORS AND AIRDUCTS.</b>	
Harland & Wolff, Ltd. .. .. .	30 adv.
Vosper Ltd. .. .. .	24 "
<b>VOICE PIPES.</b>	
Vickers-Armstrongs, Ltd. ..	51 & 52 "
<b>VOLTMETERS.</b>	
Record Electrical Co., Ltd., The ..	48 "
<b>WARSHIPS.</b>	
Bethlehem Steel Company (U.S.A.)	37 "
Brown, John, & Co., Ltd. .. ..	53 "
Cammell Laird & Co., Ltd., ..	34 "
Götaverken (Sweden) .. .. .	7 "
Harland & Wolff, Ltd. .. .. .	30 "
Hawthorn, Leslie, R. & W., & Co., Ltd. .. .. .	32 "
Kockums Mekaniska Verkstads, A. B.	9 "
Nederlandsche Vereenigde Scheepsbouw Bureaux .. .. .	26 "
Vickers-Armstrongs, Ltd. ..	51 & 52 "
<b>WATER TUBE BOILERS.</b>	
Babcock & Wilcox, Ltd. .. ..	57 "
Brown, John, & Co., Ltd. .. ..	53 "
Cammell Laird & Co., Ltd. .. ..	34 "
Götaverken (Sweden) .. .. .	7 "
Harland & Wolff, Ltd. .. .. .	30 "
Hawthorn, Leslie, R. & W., & Co., Ltd. .. .. .	32 "
Thornycroft, John I., & Co., Ltd. ..	28 "
Vickers-Armstrongs, Ltd. ..	51 & 52 "
White, J. Samuel, & Co., Ltd. ..	49 "
Yarrow & Co., Ltd. .. .. .	47 "
<b>WELDING, ARC, ARGON ARC OR GAS.</b>	
Saunders-Roe (Anglesey), Ltd. ..	27 "
Vosper Ltd., .. .. .	24 "
<b>WINCHES.</b>	
Clarke, Chapman & Co., Ltd. ..	35 "
London Electric Firm, Ltd. ..	39 "
Ward, Thos. W., Ltd. .. .. .	36 "
<b>WROUGHT IRON PLATES AND SECTIONS.</b>	
Ward, Thos. W., Ltd. .. .. .	36 "



# Ariadne knew...

When Ariadne handed Theseus a keen blade to slay the Minotaur and the thread to find his way through the Labyrinth, she showed great ingenuity. It was by this means only that Theseus kept in touch with the outside world and returned to it.

Present-day engineering has given us our own 'Ariadne's thread', the modern means of communication; equipment manufactured with the utmost care and skill by N.V. Philips' Telecommunicatie Industrie at Hilversum, Netherlands.



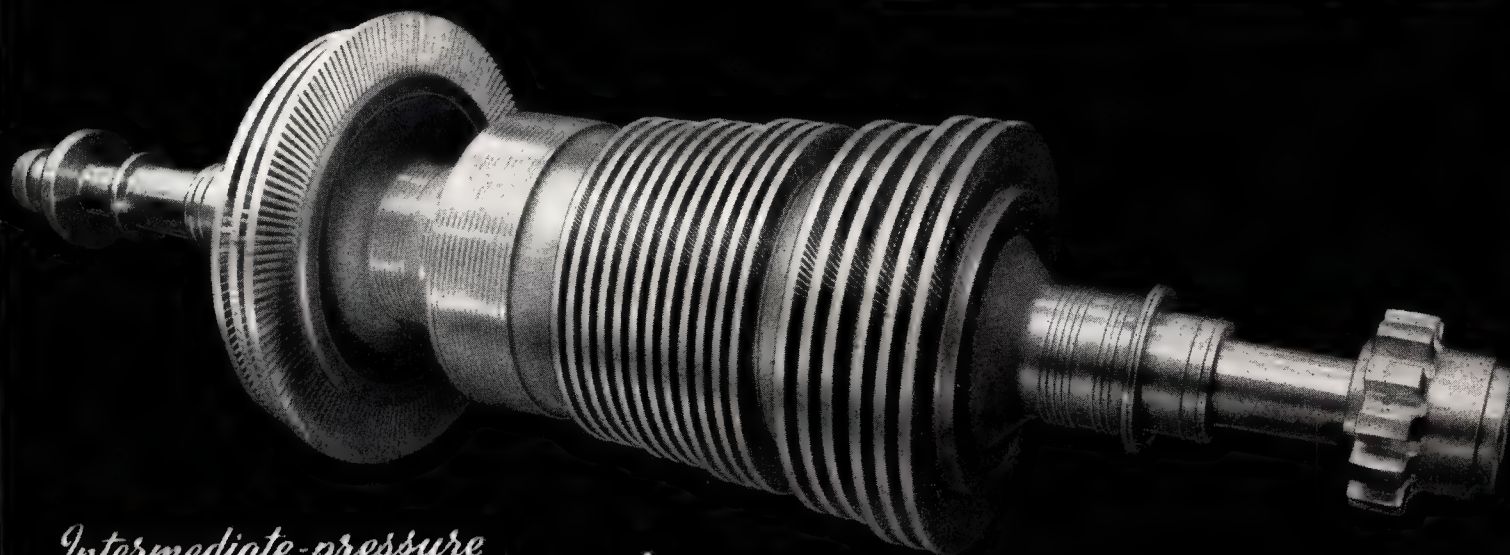
N.V. PHILIPS' TELECOMMUNICATIE INDUSTRIE, HILVERSUM, NETHERLANDS, P.O. BOX 32,

MAKERS OF RADIO, TELEVISION, RADAR, AUTOMATIC TELEPHONY AND LINE TELEPHONY EQUIPMENT

# PARSONS

MARINE GEARED

# TURBINES



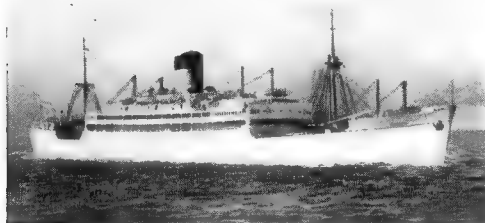
*Intermediate-pressure  
Turbine Rotor.*

**The PARSONS MARINE STEAM TURBINE CO. LTD**  
TELEGRAPHIC ADDRESS: TURBINIA · WALLSEND  
WALLSEND · ON · TYNE  
TELEPHONE NO: 63261 WALLSEND

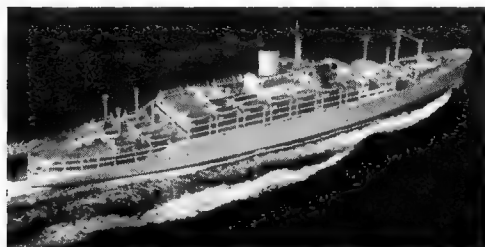




The new Cunard Liner "SAXONIA" (launched on February 17th) was built by Messrs. John Brown & Co. (Clydebank) Limited.



The S.S. "GOTHIC" (Shaw Savill Line) built by Messrs. Swan, Hunter & Wigham Richardson Ltd., Wallsend-on-Tyne.



The Orient Liner "ORONSAY" built by Messrs. Vickers-Armstrongs Ltd., Barrow-in-Furness.



The S.S. "KENYA CASTLE" (Union-Castle Line) built by Messrs. Harland and Wolff Ltd., Belfast.

These are some of the thousands of  
famous ships tubed with

**"Yorcalbro"**  
(ALUMINIUM-BRASS)

and

**"Yorkshire"**  
70/30  
CUPRO-NICKEL

## CONDENSER TUBES

"YORCABRO" (Aluminium-Brass) and "YORCUNIFE" (Copper-Nickel-Iron FOR SALT WATER PIPES AND TANKER HEATING COILS.

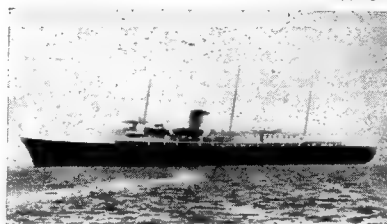
"Yorkshire" Tubes in various special alloys for Feed Water Heaters • Air Coolers Oil Coolers • Watertight Door Gear • Telemotor Steering Gear • Piston Cooling Pipes, etc.

"YORKSHIRE" CAPILLARY FITTINGS in Standard, High Duty and Special Solder types, and Fittings for use with Fractional o.d. Size Tubes, for a wide variety of marine applications.

HER MAJESTY'S YACHT "BRITANNIA", built by Messrs.  
John Brown & Co. (Clydebank) Ltd.

Crown Copyright.

Over 3,000 feet of "YORCUNIFE" (Copper-Nickel-Iron) Piping, in various sizes from 1½ in. to 9 in. bore, together with "YORCASAL" Fittings, have been supplied for the main circulating pipes and salt water services.



H.M.S. "DARING" and other "Daring" Class vessels are equipped with "Yorkshire" 70/30 Cupro-Nickel Condenser Tubes. "Yorcunife" (Copper-Nickel-Iron) Tubes for the Diesel Generator Waste Heat Boiler Connections and other Engine Room Piping, Sprays to Gun Bays, etc. "Yorkshire" Tubes and "Yorkshire" Fittings for the Fresh and Salt Water Services throughout.



The new P. & O. Liner "ARCADIA", which sailed on her maiden voyage in February—built by Messrs. John Brown & Co. (Clydebank) Limited.



The Royal Netherlands Navy Cruiser "DE RUYTER" has "Yorkshire" 70/30 Cupro-Nickel tubes installed in her main condensers.

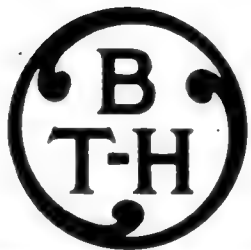


The new Orient Liner "ORSOVA", which sailed on her maiden voyage in March—built by Messrs. Vickers-Armstrongs Ltd., Barrow-in-Furness.

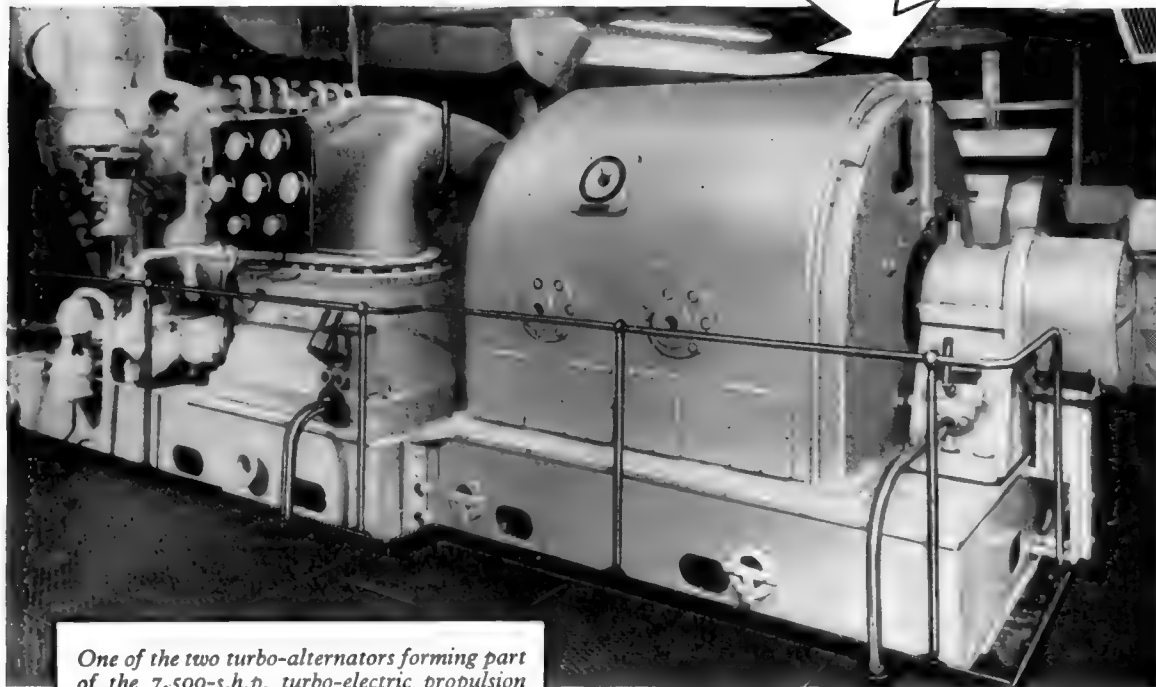


Admiralty Official Photograph

**THE YORKSHIRE COPPER WORKS LTD. • LEEDS, ENGLAND • BARRHEAD, SCOTLAND**



## Electric Ship Propulsion & Marine Radar



*One of the two turbo-alternators forming part of the 7,500-s.h.p. turbo-electric propulsion equipment by BTH in the T.E.S. Helix (The Anglo-Saxon Petroleum Co. Ltd.). Two BTH 550-kW auxiliary turbo-alternators are also installed, with associated switchgear and a large number of motors and starters for auxiliary drives.*

BTH Marine Equipment is available for any size or type of ship. Its reputation for reliability is second to none.



*BTH Type RMS2 radar equipment with 40-mile range scale fitted to S.S. Saxonsea (North American Shipping & Trading Co. (London) Ltd.). It is operated from 380-volt, three-phase, 50-cycle, A.C. supply. The single mast carrying the radar scanner also carries the signal halyards and radio aerials.*

# The **BRITISH THOMSON-HOUSTON** Company Limited

RUGBY · ENGLAND





*"It is our purpose to build,  
now and always, the  
finest ships the world  
has ever known."*



SIX LSD'S are being built by The Ingalls Shipbuilding Corporation for the United States Navy. This artist's rendering shows the new-type design of two of the vessels. Ingalls, pioneer in the construction of all-welded ocean vessels, builds luxury liners, LSD'S, LST'S, passenger and cargo ships, ice breakers and other vessels for war and peace.

## THE **INGALLS** SHIPBUILDING CORPORATION

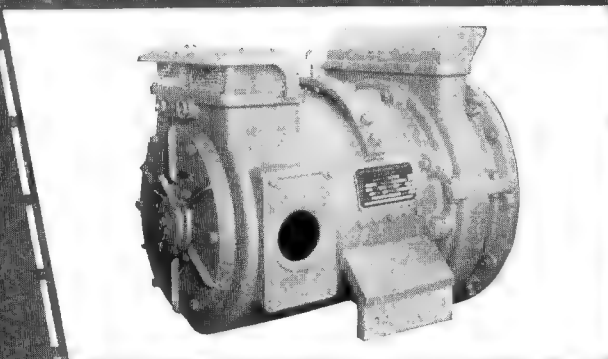
GENERAL OFFICES: Birmingham, Ala., U.S.A.

SHIPYARDS: Pascagoula, Miss.—Decatur, Ala.

BRANCH OFFICES: New York, Pittsburgh, Chicago, Houston, Washington, D.C.

# The Navy expects...

...that all equipment supplied for their vessels will match up to their own high standard of efficiency and unfailing dependability. It is significant, therefore, that Electro Dynamic Equipment is continually found in Ships of the Fleet.



**ELECTRO DYNAMIC**  
**CONSTRUCTION COMPANY LTD.**

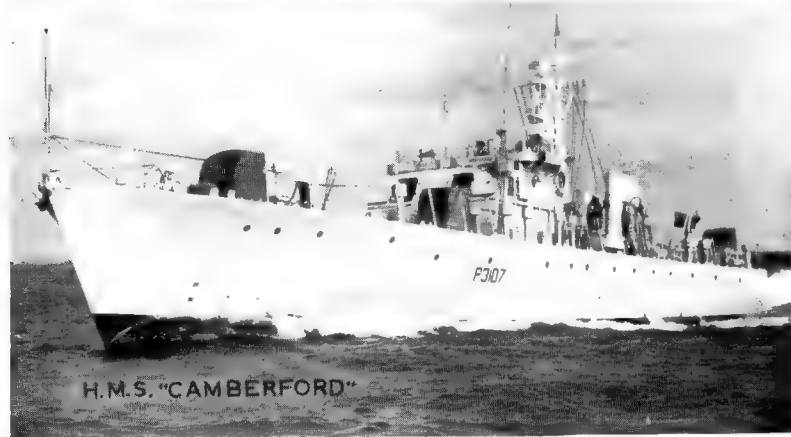
**ST. MARY CRAY, KENT** Phone: Orpington 2560/3

Switchgear Works: **BRIDGWATER, SOMERSET** Phone: Bridgwater 2882





H.M.S. "BOLD PATHFINDER"



H.M.S. "CAMBERFORD"



H.M.S. "GAY BOMBARDIER"



MOTOR TORPEDO BOAT

*For Problems Requiring Specialised Knowledge & Experience*



# VOSPER LTD

SHIPBUILDERS & ENGINEERS

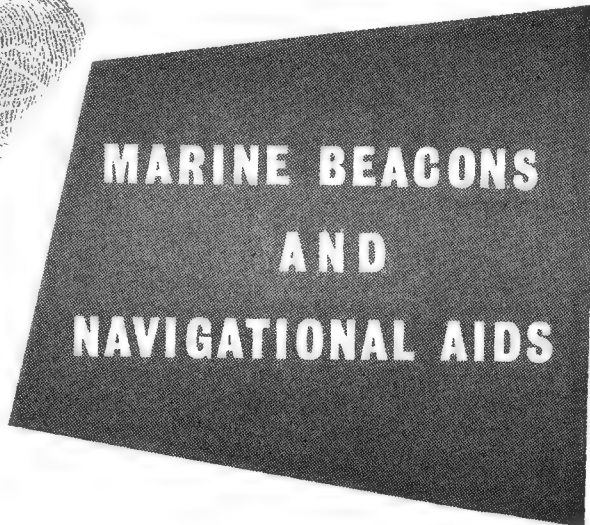

of **PORTSMOUTH** Telephone COSHAM 79451

*Specialists in High Speed Craft*



## Life line of communication...

Marconi's fitted the first ship with wireless and by 1907 200 ships and more than 100 shore stations had been equipped. Today practically every vessel that ventures on the high seas carries wireless. All radio approach and marker beacons around the British Isles have been designed and manufactured by Marconi. The mariner is warned of hazards and guided into safe channels by Marconi equipment in nearly every principal shipping lane of the world.



**MARINE BEACONS  
AND  
NAVIGATIONAL AIDS**

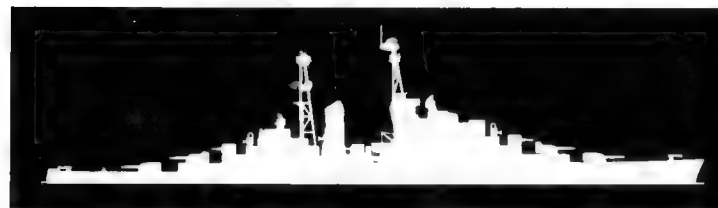


# MARCONI

MARCONI'S WIRELESS TELEGRAPH COMPANY LIMITED • CHELMSFORD • ESSEX

LG 2





Designers, builders and  
repairers of all types of  
naval vessels, turbines,  
boilers and Diesel-motors.

Torpedotubes for surface  
vessels and submarines.

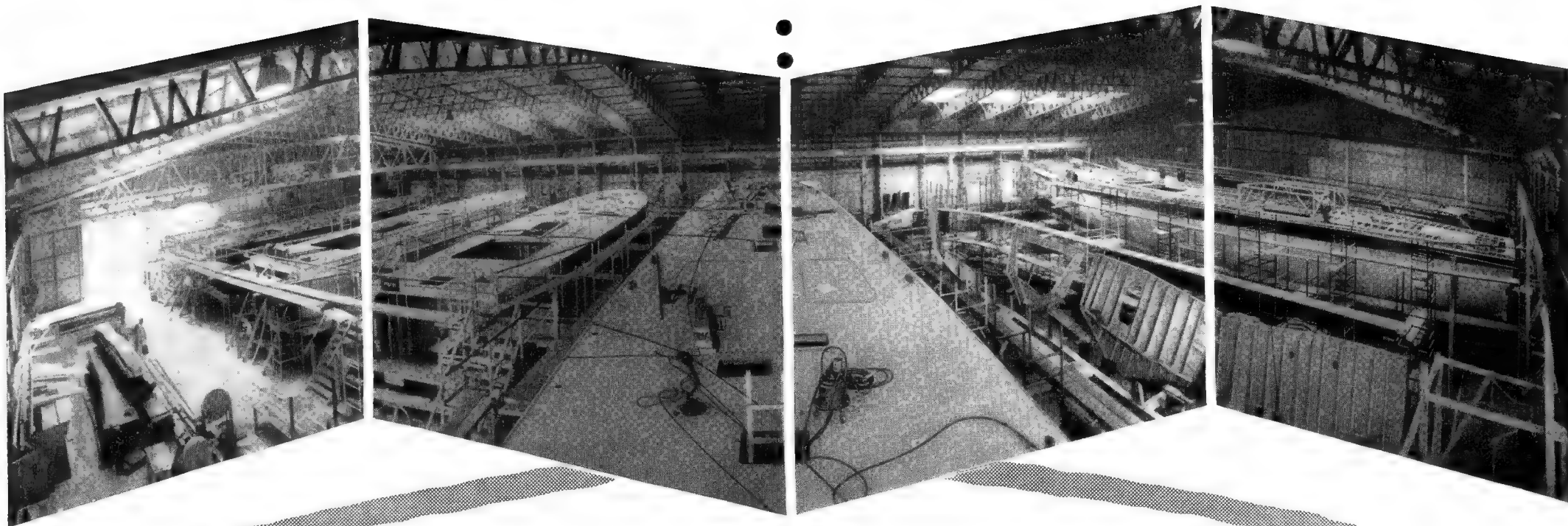
*Dutch cruiser H.M.S. „De Zeven Provinciën“*

## **N.V. NEDERLANDSCHE VEREENIGDE SCHEEPSBOUW BUREAUX - DEN HAAG**

NETHERLANDS UNITED SHIPBUILDING BUREAUX LTD.

**DE ROTTERDAMSCH E DROOGDOK MIJ N.V. - ROTTERDAM**

**NED. DOK EN SCHEEPSBOUW MIJ V.O.F. - AMSTERDAM • N.V. KON. MIJ „DE SCHELDE“ - VLISSINGEN  
WERKSPoor N.V. - AMSTERDAM • DOK- EN WERF-MIJ WILTON-FIJENOORD N.V. - SCHIEDAM**



**Something new in  
shipbuilding is  
always being launched . . .**

**BY SAUNDERS-ROE (ANGLESEY) LTD. BEAUMARIS 130**

*Saunders-Roe (Anglesey) Limited are specialists in the design and construction of small warships and other marine craft. In their well equipped shipyard at Beaumaris they combine the best traditions of shipbuilding with the effective use of the most modern methods and equipment. They have unrivalled experience in building hulls of light alloy, fibre-glass reinforced plastics and laminated timber construction.*





Our association with the Royal Navy has been continuous since 1877 when we launched the first British Torpedo Boat Destroyer.

We show here H.M.S. "Duchess," the latest of well over a hundred destroyers, and one of the new type Coastal Minesweepers in the construction of which we were selected by the Admiralty to act as "parent" firm for the production of the working drawings for the type of vessel for supply to a group of builders.

Other contributions from our Yards for our own and foreign navies include Minelayers, Gunboats, Patrol boats, and many types of special Service craft.

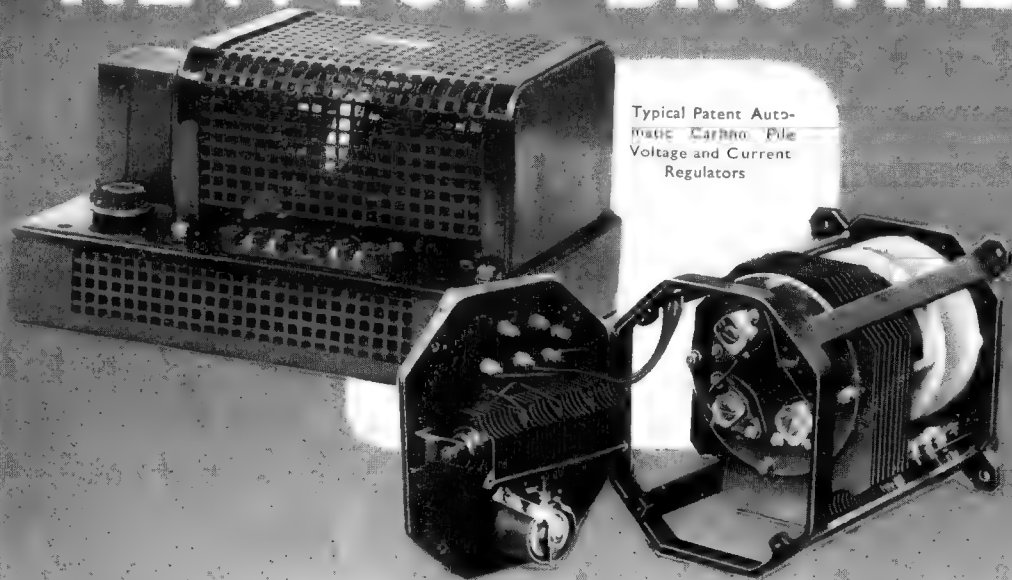
**NAVAL CRAFT**

by

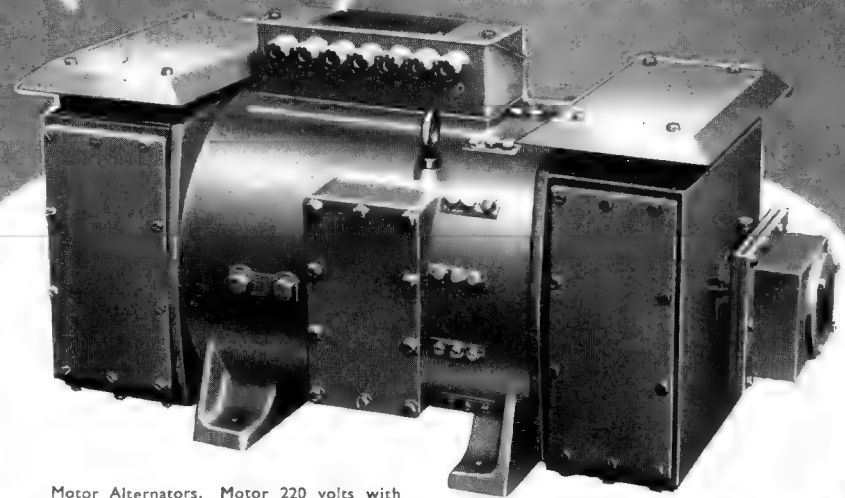
**THORNYCROFT**

JOHN I. THORNYCROFT & CO., LIMITED, WOOLSTON WORKS, SOUTHAMPTON.

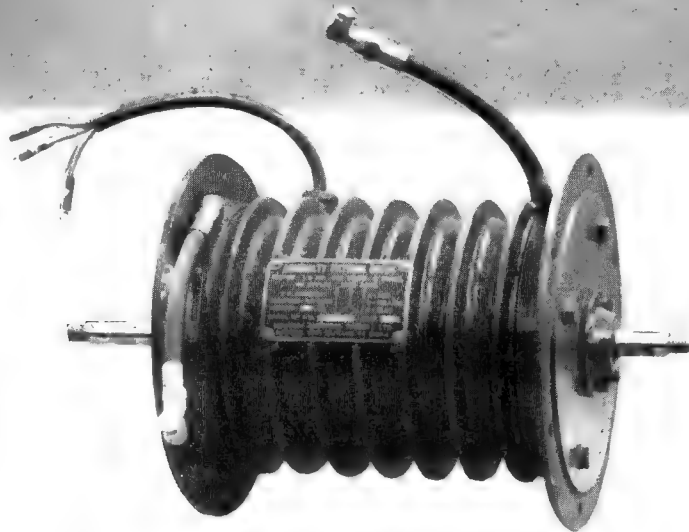
# NEWTON BROTHERS (DERBY) LIMITED



Typical Patent Automatic Carbon Pile Voltage and Current Regulators



Motor Alternators. Motor 220 volts with Speed Regulator. A.C. output 2.5 k.w. 120 volts. 3 phase 333 cycles per second.



Typical special purpose Admiralty motor.

NEWTON-DERBY Motor Generators, Motor Alternators, Synchronous Motors and Automatic Patent Carbon Pile Voltage Regulators, have been used on H.M. Ships for many special purposes including Battery Charging, Power for Radar, Wireless, Magslip and Gyro Services, etc., etc.

## ELECTRICAL

## ENGINEERS AND MANUFACTURERS

HEAD OFFICE & WORKS:  
ALFRETON RD., DERBY

Telephone: 47676 (3 lines) Derby  
Telegrams: DYNAMO DERBY



LONDON OFFICE:  
IMPERIAL BUILDINGS  
56 KINGSWAY, W.C.2



# H&W

HARLAND AND WOLFF



H.M. Fleet Aircraft Carrier  
"EAGLE"

## aircraft carriers

M.740.

BELFAST • GLASGOW • LONDON • LIVERPOOL • SOUTHAMPTON

# a.c. ships' switchgear...



by

## WHIPP & BOURNE LTD

SWITCHGEAR SPECIALISTS • CASTLETON • ROCHDALE • LANCASHIRE





H.M.S. Saintes  
a flotilla leader of the  
Battle Class



# Hawthorn Leslie

Builders of warships of all classes



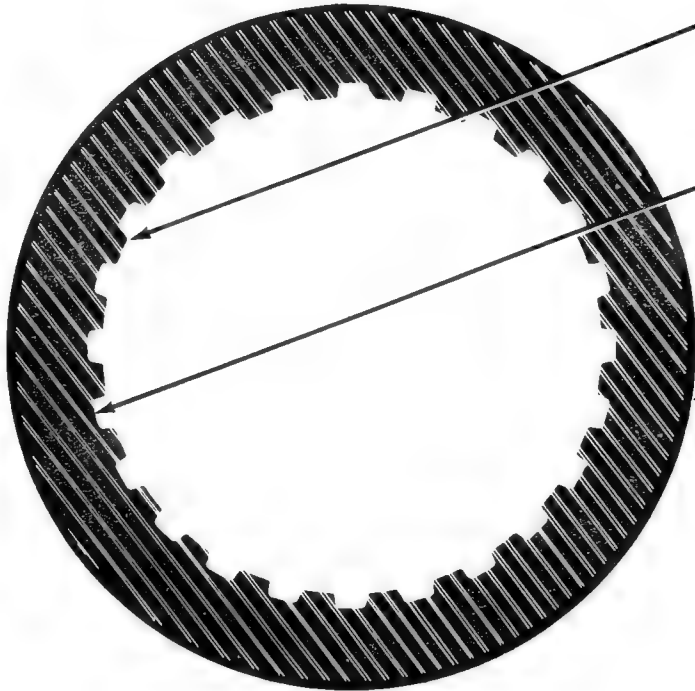
H.M.S. Solebay  
a flotilla leader of the  
Battle Class



R. & W. HAWTHORN, LESLIE & COMPANY LIMITED NEWCASTLE UPON TYNE ENGLAND

# CHROMIUM *makes a difference!*

*Here . . . . . Here . . . . . and Here.*



**CHROMIUM** increases barrel life and weapon accuracy, lowers barrel surface temperature.

**CHROMIUM** resists mechanical erosion in gun barrels.

**CHROMIUM** resists thermal erosion in gun barrels.

**CHROMIUM** resists chemical erosion in gun barrels.

**VAN DER HORST** — the foremost designer of electroplating fixtures for applications where precision is imperative.

HILVERSUM, HOLLAND



OLEAN, NEW YORK





---

---

# **CAMMELL LAIRD**

**& CO. (SHIPBUILDERS & ENGINEERS) LTD.**

## **BIRKENHEAD**

**SHIPBUILDERS**

**BOILERMAKERS**

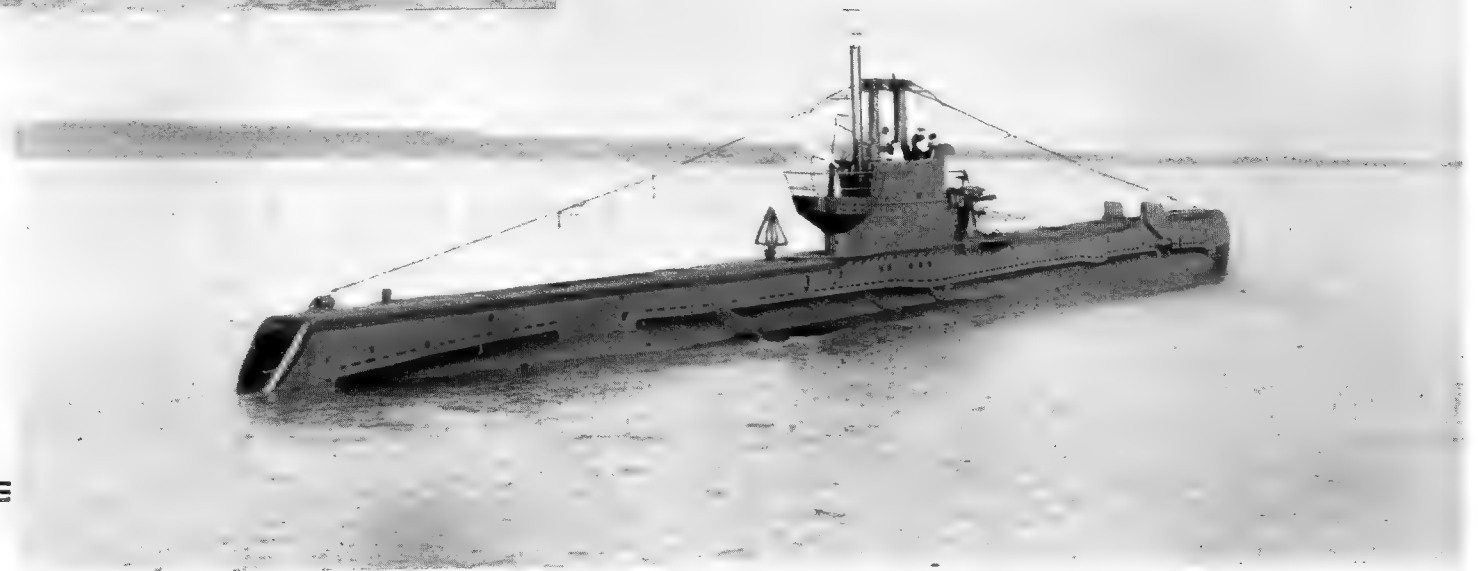
**ENGINEERS**

**REPAIRERS**

---

---

---



*Clarke Chapman*

**SPECIALISE IN  
THE DESIGN &  
MANUFACTURE OF**

**MARINE  
AUXILIARIES**

H.M.S. Daring



*Clarke Chapman*

Steam and Electric Winches  
Windlass and capstan gears  
Pumping machinery  
Ships generators and switchboards

Ships electric lighting and power  
installations  
Searchlight projectors  
Floodlights

**SUPPLIERS TO THE ADMIRALTY SINCE 1884**

**CLARKE, CHAPMAN & CO LTD**

**Victoria Works**

**Gateshead 8**

**Co. Durham**

Telephone : Gateshead 72271 (10 lines)

Telegrams : "Cyclops" Gateshead

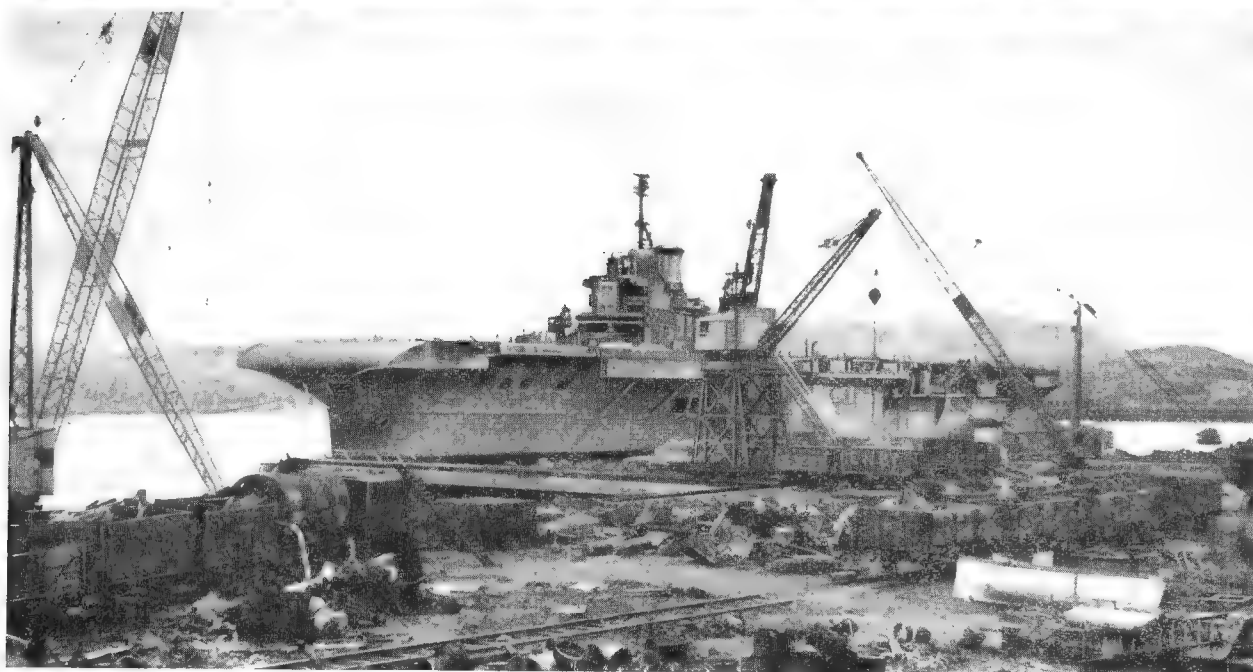
London Office : Dunster House · Mark Lane · E.C.3

Telephone : MINcing Lane 8345-6-7

Telegrams : "Cyclops" Easphone London



*The Canadian Pacific liner "Empress of Australia" on arrival at Inverkeithing—one of the bigger vessels dismantled by the Company.*



*H.M.S. "Formidable" the famous aircraft carrier of Malta and Matapan, lies alongside the deep water quay at Inverkeithing.*

# TWW

The recovery and reconversion of scrap metals is an integral part of the country's industrial economy. WARD'S ship-breaking and scrap yards produce many thousands of tons annually, and every ton saves valuable shipping space and helps to rebuild useful tonnage.

*shipbreaking works  
at...*

INVERKEITHING · BRITON FERRY  
GRAYS · BARROW-IN-FURNESS  
MILFORD HAVEN · PRESTON

**THOS W. WARD LTD**  
**ALBION WORKS · SHEFFIELD**

TELEPHONE: 26311 (22 Lines) · TELEGRAMS: "FORWARD, SHEFFIELD"

LONDON OFFICE: BRETTENHAM HOUSE · LANCASTER PLACE · STRAND · W.C.2



*U. S. S. Salem, 17,000-Ton Heavy Cruiser*

## **BETHLEHEM STEEL COMPANY**

### *Shipbuilding Division*

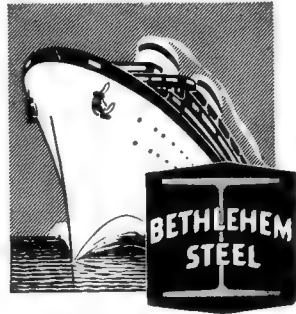
GENERAL OFFICES: CUNARD BUILDING, 25 BROADWAY, NEW YORK 4, N. Y. • CABLE ADDRESS: "BETHSHIP," NEW YORK, N. Y.

On the Pacific Coast shipbuilding and ship repairing are performed by the Shipbuilding Division of Bethlehem Pacific Coast Steel Corporation

#### **SHIP REPAIR YARDS**

**33 Dry Docks**

**BOSTON HARBOR  
NEW YORK HARBOR  
BALTIMORE HARBOR  
BEAUMONT, TEXAS  
LOS ANGELES HARBOR  
SAN FRANCISCO HARBOR**



#### **SHIPBUILDING YARDS**

**42 Building Ways**

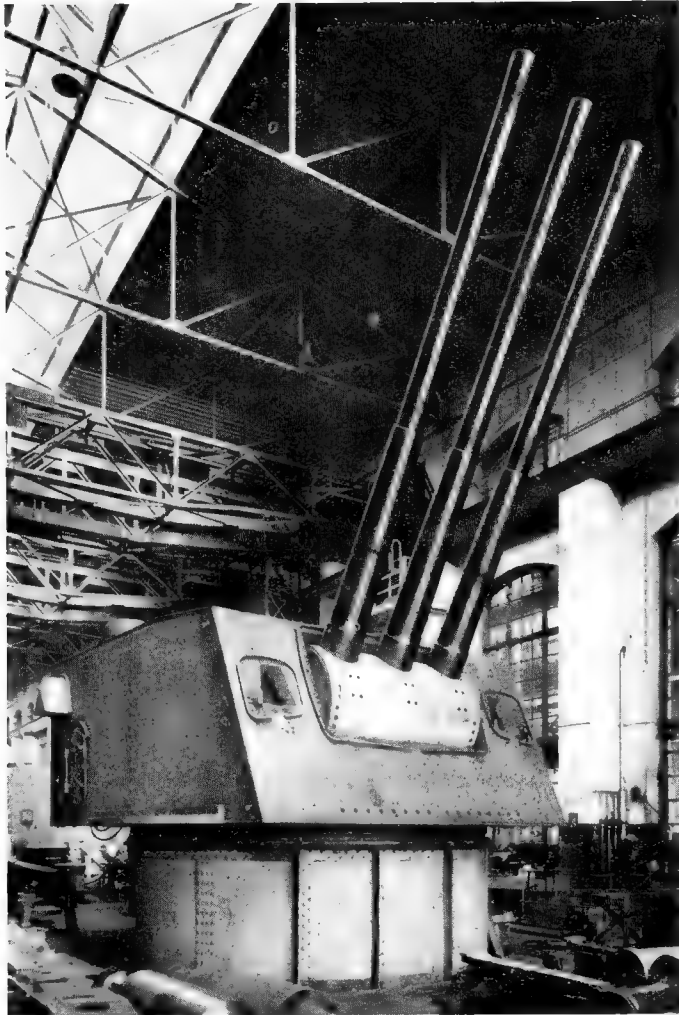
**QUINCY, MASS.  
STATEN ISLAND, N. Y.  
SPARROWS POINT, MD.  
BEAUMONT, TEXAS  
TERMINAL ISLAND, CALIF.  
SAN FRANCISCO, CALIF.**

#### *Special Marine Products*

Geared Turbine Propelling Machinery  
Turbine Rotors, Blading and Accessories  
Diesel and Steam Engine Parts  
Crankshafts, Line and Propeller Shafts  
Condensers, Feed Heaters, Lube Oil Coolers  
Bronze, Iron and Steel Propellers  
Low Pressure Single Effect Distilling Plants  
Oil and Water Separators  
Special Valves and Fittings  
Rudders, Stern Frames, Stern Tubes and Bushings  
Fabricated Steel and Weldments  
Deck and Engine Auxiliary Machinery Parts  
Bronze, Iron and Steel Castings

**SHIPBUILDERS • SHIP CONVERTERS • SHIP REPAIRERS • NAVAL ARCHITECTS and MARINE ENGINEERS**

# BOFORS ORDNANCE WORKS



15-cm Naval Guns  
in Triple Turret

Makers of :

NAVAL GUNS IN TWIN AND TRIPLE TURRETS  
with Automatic Loading Machinery, cali-  
bres up to 15 cm (6 in.).

ANTI-AIRCRAFT GUNS

Fixed and mobile, with Remote Control,  
calibres up to 12 cm. (4 $\frac{3}{4}$  in.).

ARMY AND FORTIFICATION GUNS

AMMUNITION

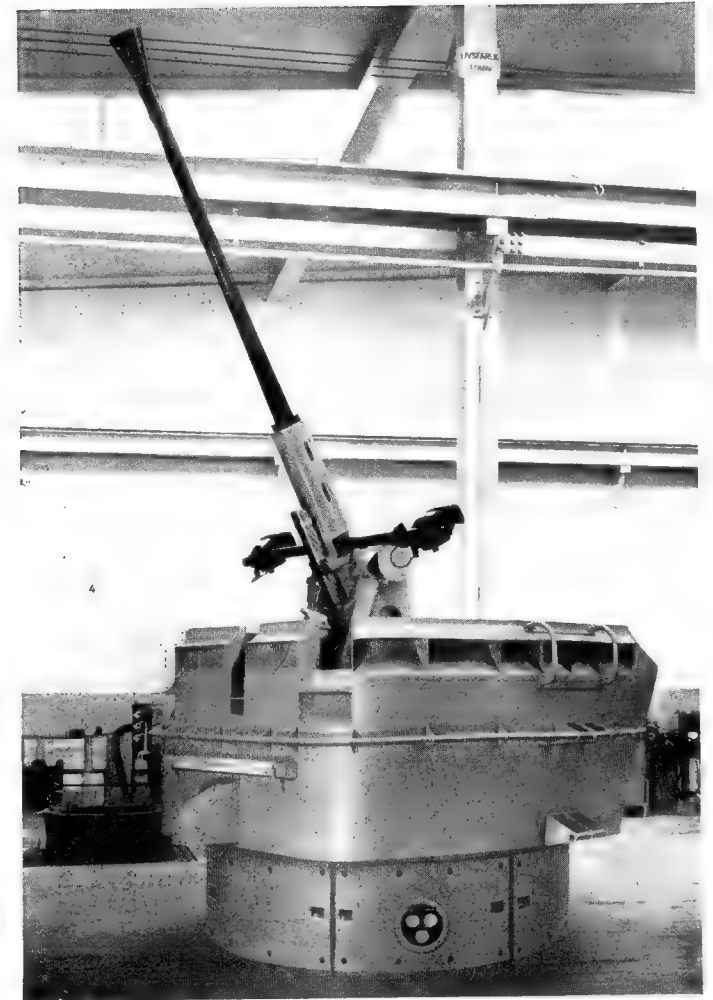
All types between 20 mm. and 30 cm.  
( $\frac{3}{4}$  in. and 12 in.)

FUZES

All types including proximity fuzes for  
anti-aircraft and field-artillery purposes

ROCKETS . AERIAL BOMBS . DEPTH CHARGES

PROPELLANTS . EXPLOSIVES . STEEL FOR  
SHELLS etc.



40-mm Automatic Gun L/70  
in Torpedo Boat Mounting

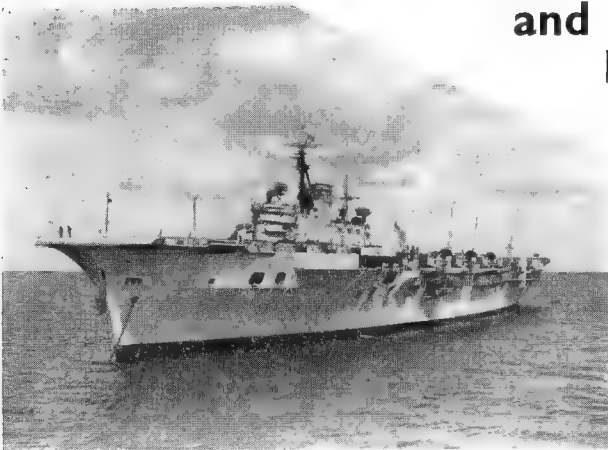
## AB BOFORS BOFORS, SWEDEN



# PIPEWORK Specialities

and

## EVAPORATOR DISTILLERS for SHIPS



"H.M.S. Eagle."

Crown Copyright Reserved

- Aiton Corrugated Bends and Pipes.
- 'Corwel' Seal-welded Pipe Joints.
- Carbon and Alloy Steel Pipework for all Pressures and Temperatures.
- Bulkhead Expansion Joints and Deck Seals.
- Bellows Expansion Joints.
- We also design and manufacture a Marine Evaporator Distiller which constitutes a marked advance in the means for producing pure distilled water from sea water.

# AITON

& CO., LTD.

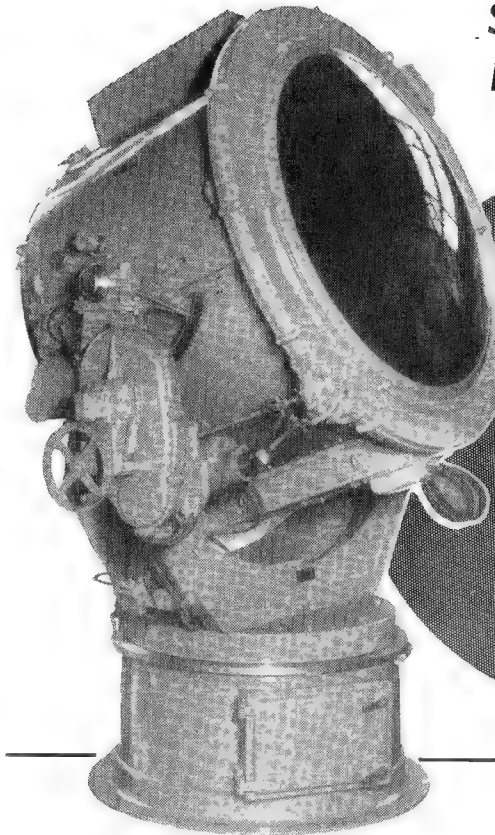
ESTABLISHED 1900

Works : DERBY and SUNDERLAND. Head Office: DERBY

Tel. 44271 (6 lines) Derby.

'Grams. 'Channeled' Derby.

*Skilfully made by  
London Electric Firm Ltd.*



**Giant  
NEW  
Electronically  
Operated  
Searchlight**

THIS is no ordinary searchlight. It is electronically operated by remote control and can be laid automatically from a ship's fire control equipment—it weighs 2½ tons and is nearly 9ft. high. Altogether there are ten electric motors or generators on the searchlight and the base houses 26 slip-rings and brushes to convey various voltages and currents to different parts of the searchlight while it is actually moving

It is one of three 120 cm. naval searchlights recently completed for Vickers-Armstrongs Ltd. and is another example of well-designed L.E.F. equipment.

If you need searchlights made to special requirements or of standard design get in touch with London Electric Firm. They have had nearly 50 years' experience in this specialised work and manufacture projectors suitable for every type of vessel.



T1B 64A.

**LONDON ELECTRIC FIRM LTD.**

**Brighton Road, South Croydon, Surrey.**

Telephone: Uplands 4871.

Telegrams: Electric, Phone, Croydon.

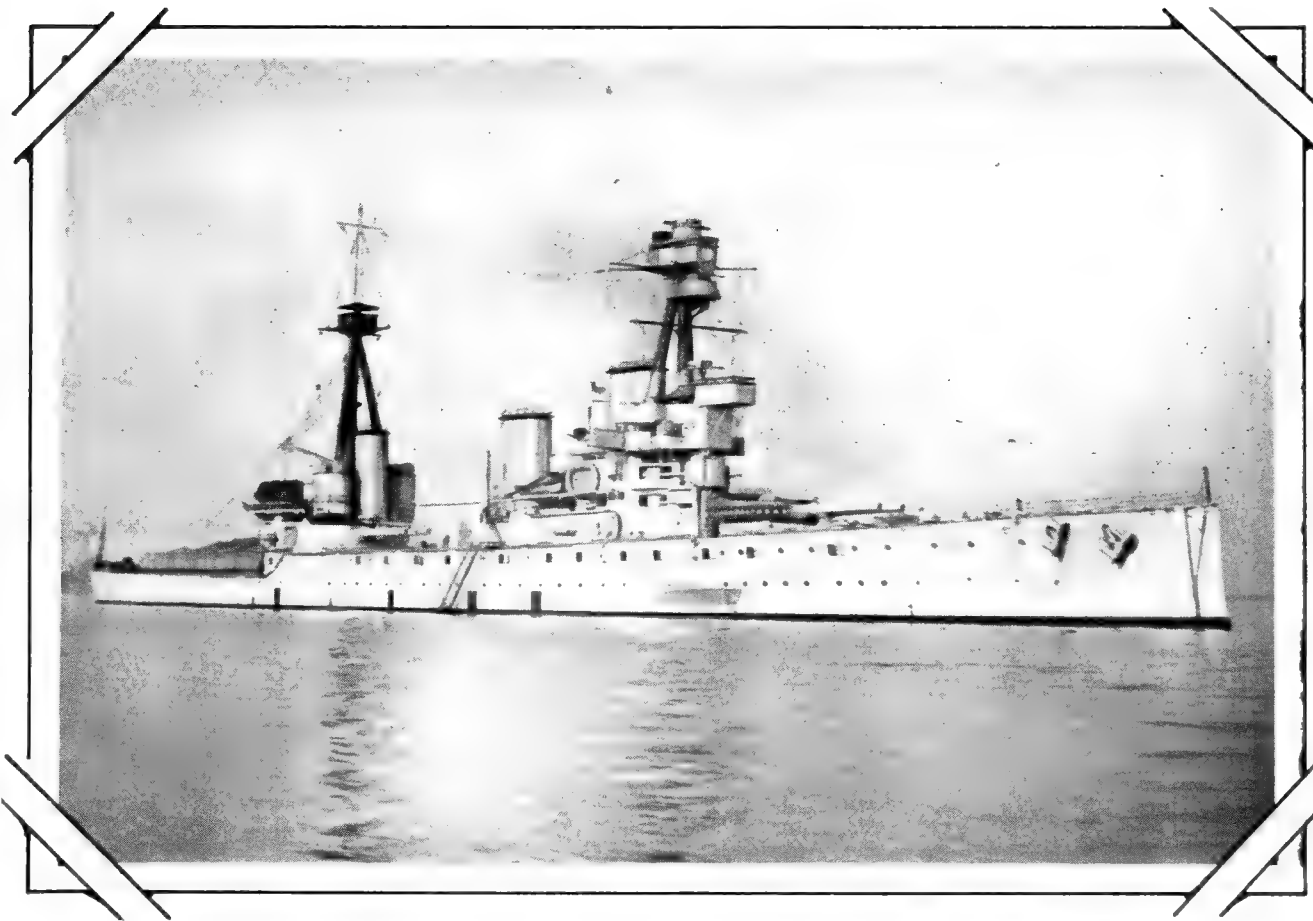
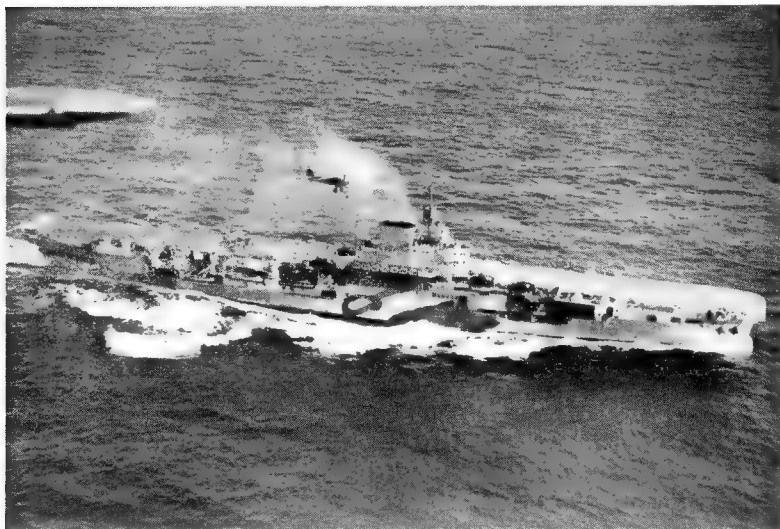


# *40 Years on . . .*

The close association between the Sperry Gyroscope Company and the Royal Navy dates from 1914, before the first World War, when for the first time Sperry Gyro Compasses were installed in ships of the Fleet.

Since those early days the Company has been a supplier to the Royal Navy of equipments calling for exceptional standards of manufacturing precision, accuracy in operation and reliability in service.

H.M.S. *Indomitable*, 1954



H.M.S. *Indomitable*, 1914

## **S P E R R Y**

*Gyro Compasses and  
Fire Control Equipment*

SPERRY GYROSCOPE COMPANY LIMITED, GREAT WEST ROAD, BRENTFORD, MIDDLESEX.

# Monocles for MARINERS?

KENT Clear View Screens improve mariners' vision brilliantly. To date, no fewer than 18,950 have been supplied for ships all over the world—for bridge and wheel-house windows, where they are the only means of keeping on efficient look-out in heavy rain, snow, or spray. The constant clarity of the revolving glass disc of a KENT Clear View Screen is uncanny. However, seeing is believing.



## KENT CLEAR VIEW SCREENS

*Specified as standard equipment by the Admiralty*

GEORGE KENT LTD. • LUTON • LONDON • RESOLVEN

Telephone: LUTON 2440

# WORLD RAILWAYS

## 1954-55

(THIRD EDITION)

COMPILED AND EDITED BY  
**HENRY SAMPSON**

An illustrated survey of railway operation and equipment throughout the world, giving details of:—

**Public Service Railways**  
**Underground Railways**  
**Major Manufacturers**  
**Rail Traction Diesel Engines**

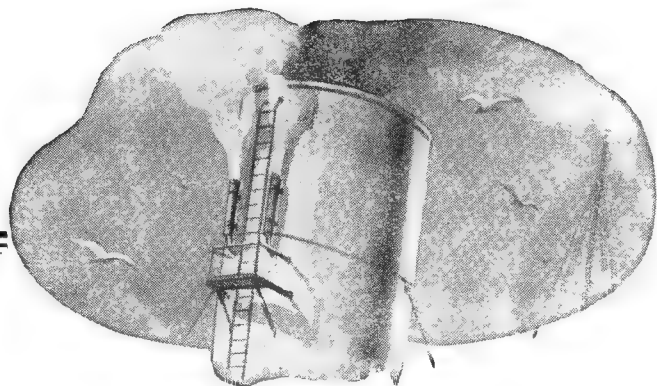
with illustrated articles on air-conditioning, 50-cycle electrification, Talgo train, etc.

*Great Britain:—*

**SAMPSON LOW, MARSTON & Co. Ltd.**  
25, GILBERT STREET, - LONDON W.1.

*United States of America:—*

**RAND McNALLY & COMPANY.**  
P.O. Box 7600, - CHICAGO 80.



TRADE MARK  
**BIRSO**

## High Tensile Aluminium Bronze CASTINGS

Possessing a Tensile Strength of 45 tons per sq. in., "BIRSO" Castings permit a GREAT SAVING IN WEIGHT by the cutting down of sections, combined with the low specific gravity of 7.5. "BIRSO" Aluminium Bronze Castings are guaranteed to withstand any hydraulic pressure and to resist sea-water attack. We are specialists in all kinds of **NON-FERROUS CASTINGS** including Phosphor Bronze, Gunmetal, Manganese Bronze and Aluminium.

Also makers of Finished Propellers and Precision Machined Parts.  
*Fully approved by Admiralty and A.I.D.*

**T. M. BIRKETT & SONS. LTD.**  
**HANLEY · STAFFS**

'Grams; Birkett, Hanley 'Phone: Stoke-on-Trent 2184-5-6

*in association with*

**BILLINGTON & NEWTON LTD.**  
**LONGPORT, STOKE-ON-TRENT**

'Grams: Bronze, Phone, Longport 'Phone: Stoke-on-Trent 87303-4 & 88147

B76c

## *Air Power at Sea*

### H.M.S. EAGLE

Eagle, an armed East Indiaman of the early 17th century; Eagle, The Royal Navy's largest aircraft carrier—first and twenty-first of England's fighting ships to bear the name. Eagle of 1625 carried twenty-two guns. Her modern successor launched in 1946 will operate Fairey Gannets, the latest and most powerful anti-submarine air weapon from a long line designed and produced by Fairey Aviation for the Fleet Air Arm.

Much of the Navy's striking power rests in her carriers, a large proportion of whose aircraft now as hitherto are of Fairey design and construction.

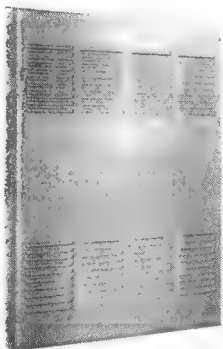
"Crown copyright of the badge of H.M.S. "EAGLE" is reserved and reproduction is made by permission of the Admiralty and H.M. Stationery Office

**FAIREY**  
Powered by an Armstrong Siddeley  
"Double Mamba" **GANNET**



THE FAIREY AVIATION COMPANY LIMITED · HAYES · MIDDLESEX





WAFFER HEATER.

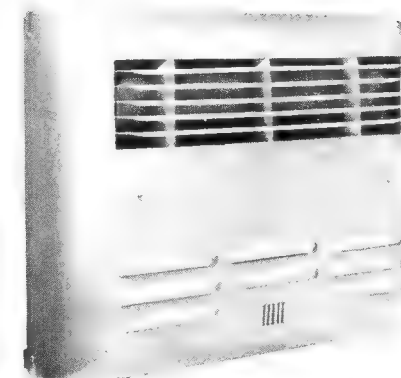
# THE LATEST ADDITION TO THE RANGE OF GRAHAM CONVECTORS **THE WAFFER HEATER**

IDEAL FOR SMALL CABINS, ALLEYWAYS, STORES, ETC.  
OVERALL PROTRUSION FROM BULKHEAD 3½".

## **GRAHAM MARINE EQUIPMENT**

ALSO INCLUDES  
TELEPHONES, BELLS, RELAYS, AMPLIFIERS, LOUDSPEAKERS,  
AMPLIFIED TELECOMMUNICATION SYSTEMS,  
BATTERY CHARGERS.

ALFRED GRAHAM & CO. LIMITED, HALIFAX, YORKS.



STANDARD Mk. II  
CONVECTION HEATER.

# **MADSEN**

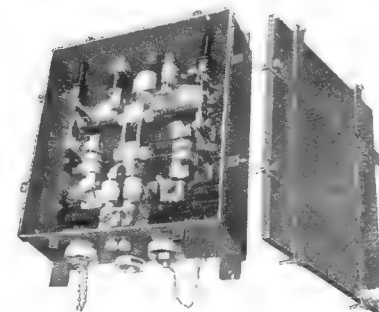
- Machine Guns for all designs of rifle cartridges
- Sub-Machine Guns (Machine Carbines)
- 2-in. Mortars
- 20 mm. Machine Cannon for Close Range A.A.  
Defence and for Naval Landing Parties
- Semi-Automatic Rifles and Light-Weight Military  
Rifles

DANSK INDUSTRI SYNDIKAT, COMPAGNIE MADSEN, A/S, Copenhagen Denmark.

# **M<sup>c</sup>GEOCH**

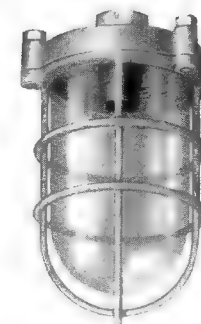
Established 1832

specialists in **MARINE**  
**SWITCH and FUSE GEAR,**  
**watertight SOCKETS and PLUGS,**  
**LIGHTING FITTINGS,**  
**BRASSFOUNDRY, etc.**



Registered

Trade  Mark



**WILLIAM M<sup>c</sup>GEOCH & CO. LTD.**

Works : BORDESLEY BIRMINGHAM 10

Head Office : 28 West Campbell Street,  
GLASGOW C.2.

also LONDON & NEWCASTLE-ON-TYNE

**NAVAL TELESCOPES  
OF ALL TYPES,  
SIZES, AND POWERS**



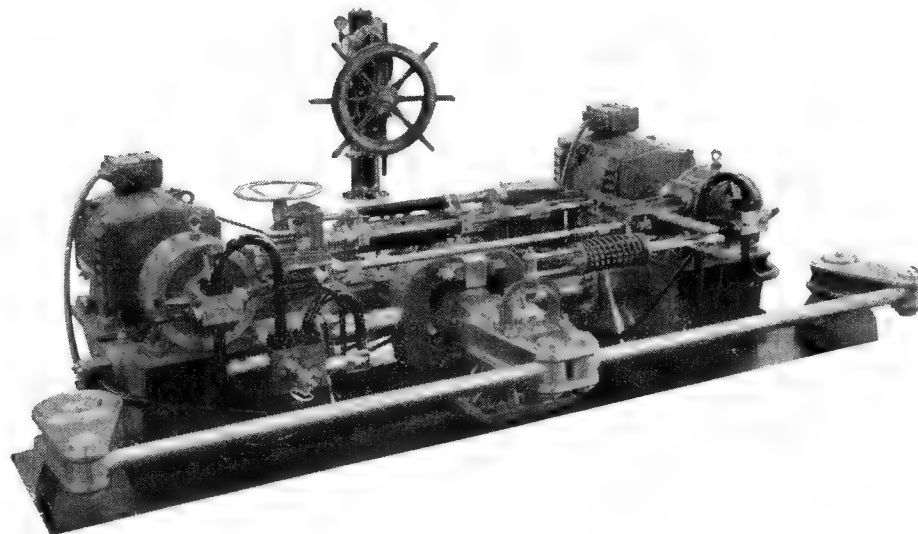
**SUPPLIERS OF ALL TYPES OF  
OPTICAL AND SCIENTIFIC  
EQUIPMENT TO THE ROYAL NAVY**

**W. OTTWAY & CO., LTD.**

**ORION WORKS, NORTHFIELD AVENUE,  
EALING, LONDON, W.13**

ESTABLISHED 1640

**MACTAGGART, SCOTT  
& CO., LTD.**



**STEERING GEARS & TELEMOTOR GEARS**

AND MANY OTHER MARINE AUXILIARIES

FOR

NAVAL & MERCHANT VESSELS

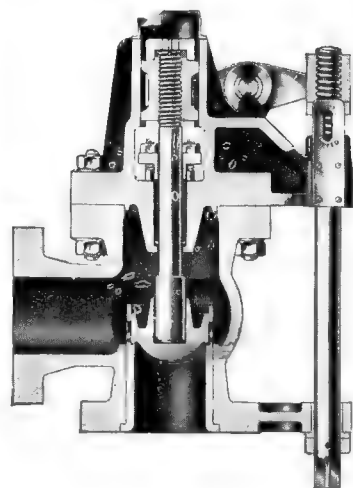
**STATION IRONWORKS, LOANHEAD, MIDLOTHIAN,  
SCOTLAND.**

Telegrams : "VALVE," LOANHEAD

Phone : LOANHEAD 311, 312 & 313



**BELDAM ASBESTOS COMPANY LIMITED** · Hounslow · Middlesex · England



## COCKBURNS LIMITED

*The World Renowned  
Steam Valve Specialists*

**CARDONALD — GLASGOW**

ESTABLISHED 1862.

**FEED CHECK VALVES  
PATENT SCREW DOWN  
NON-RETURN TYPE**

## PERFECTION IN MINIATURE

for Publicity  
and Exhibition



Such is their reputation in the model making world that you can be certain that every Bassett-Lowke model is exactly to scale and perfect down to the last detail. For over fifty years Bassett-Lowke scale models have been chosen by leading shipbuilders and owners to represent their most famous craft.

*Exhibition model of ship No. 1823 "LEDA" to the scale  $\frac{1}{2}$ " to 1". Made to the order of Messrs. Swan, Hunter & W. R., Ltd.*

We shall be pleased to send free to executives and purchasing agents, our brochure (SM/106) "Models for Exhibition and Publicity".

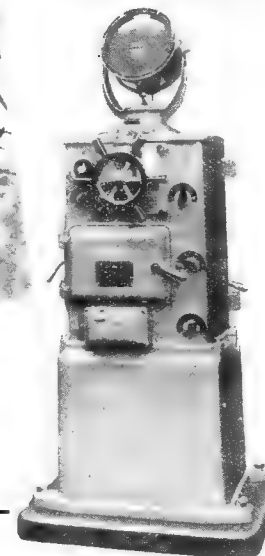
**BASSETT-LOWKE LTD.**  
LONDON NORTHAMPTON MANCHESTER

# Brown

**GYRO COMPASS EQUIPMENT**



**S. G. BROWN LTD.**  
SHAKESPEARE STREET, WATFORD, HERTS.  
Tel. : Watford 7241 Grams: "Sibronwix, Watford."



All Royal Fleet Auxiliary tankers are now fitted with Brown Automatic Helmsmen.

This equipment greatly assists fuelling the Royal Navy when at sea.



# JANE'S ALL THE WORLD'S AIRCRAFT

1954-55

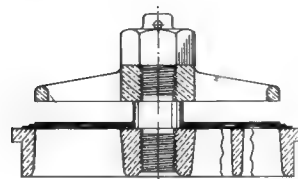
COMPILED AND EDITED BY  
LEONARD BRIDGMAN

THE ILLUSTRATED ANNUAL RECORD OF  
AVIATION DEVELOPMENT AND PROGRESS

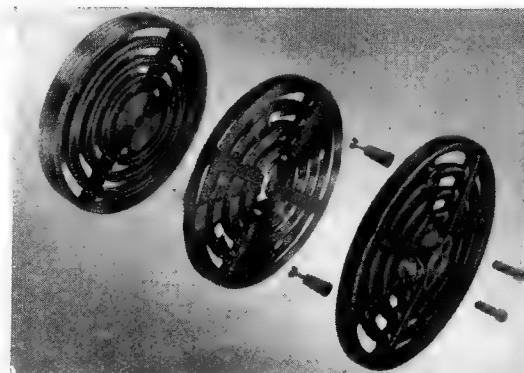
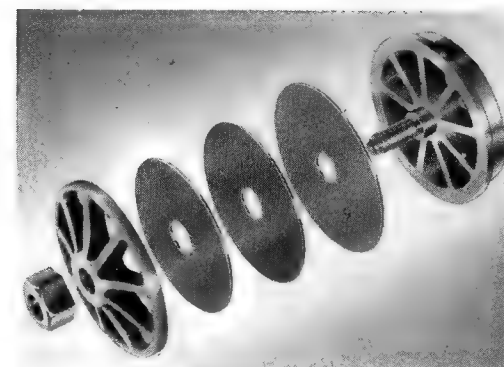
GREAT BRITAIN:—  
SAMPSON LOW, MARSTON & CO. LTD.  
25 GILBERT STREET, LONDON, W.1., ENGLAND

UNITED STATES OF AMERICA:—  
McGRAW-HILL BOOK COMPANY, INC.  
330 WEST 42ND STREET, NEW YORK 18, U.S.A.

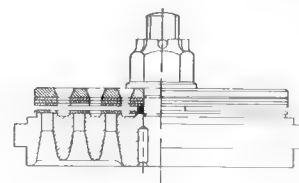
CANADA:—  
McGRAW-HILL BOOK COMPANY OF CANADA, LTD.  
253 SPADINA ROAD, TORONTO 4, CANADA.



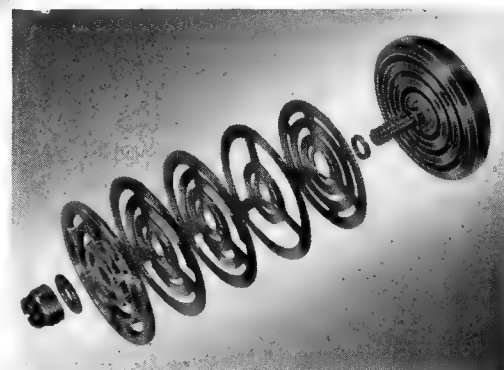
Original Kinghorn Valves  
for Marine Pumps.



Scavenging Valves for  
Diesel Engines.



Automatic Valves for Air and  
Refrigerating Compressors.



***METALLIC VALVE CO LTD***

117/125 BRIDGE STREET, BIRKENHEAD



## ***Man of War***

H.M.S. "Decoy"  
one of the latest  
destroyers to enter  
the Royal Navy.

## ***Maid of Peace***

"Maid of Ashton"  
a twin screw motor  
ship for the Clyde  
Coastal services of  
British Railways.



*Two of the ships recently built by YARROW & CO. LTD. who specialize in the design and construction of Destroyers, Frigates, Gunboats, etc., the smaller type of high-class Passenger and Cargo ships and also Shallow Draught vessels of all kinds.*

# YARROW

*Shipbuilders, Engineers & Boilermakers*

YARROW & COMPANY LIMITED · SCOTSTOUN · GLASGOW

**L55**  
Sound-powered  
intercommunicating  
Telephone with  
6-way rotary Selector



**LOUDSPEAKING  
NOISEPROOF &  
SOUND-POWERED**  
(Batteryless)

## **TELEPHONES**

*in a comprehensive range for*

**NAVIGATING**

**FIRE-CONTROL**

**& ENGINE ROOM**

**CIRCUITS**

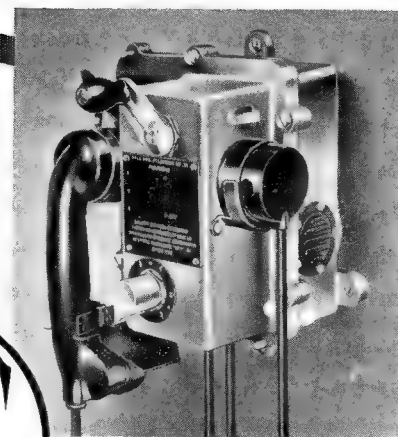
*Designed & Manufactured by*

**TELEPHONE MANUFACTURING CO. LTD**

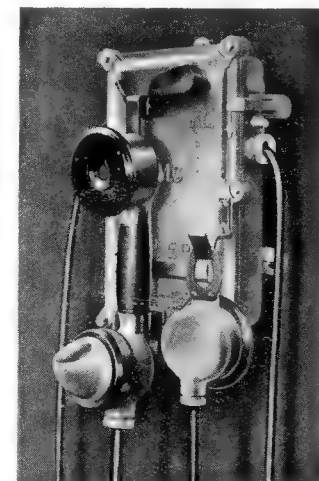
*Contractors to the British Admiralty, Ministry of Supply and Postmaster General*

**HOLLINGSWORTH WORKS, DULWICH, LONDON, SE21, ENGLAND**

*Telephone: GIPsy Hill 2211 Cables: BUBASTIS LONDON*



**L44/L45**  
Bulkhead Telephone  
with "Loud speaking"  
microphone (L44)  
or "Noiseproof"  
microphone (L45)



**T.M.C.  
MARINE TELEPHONES**  
*are used by  
the Governments of*  
**BRITISH COMMONWEALTH  
FRANCE  
DENMARK  
THE NETHERLANDS  
NORWAY  
PORTUGAL  
BRAZIL  
ARGENTINA  
GREECE  
JUGOSLAVIA**



Example of a Record Bridge Electric Tachometer. Calibrated to individual requirements. With or without internal illumination.

## THEY GO ON RECORD

They go on Record — as satisfied users of the unfailingly accurate and precision built range of Record Electrical Instruments designed to Merchant Navy and Admiralty requirements. You will be wise to specify Record "Circscale" Tachometers.



**THE RECORD ELECTRICAL CO. LTD.**  
BROADHEATH • ALTRINCHAM • CHESHIRE

★ Specify CIRSCALE — The Finest Electrical Measuring Instruments.

## DIVING APPARATUS

*OF ALL TYPES INCLUDING  
THE AQUALUNG*

**MARCONI—SIEBE, GORMAN  
UNDERWATER TELEVISION  
EQUIPMENT**

### BREATHING APPARATUS

*of many patterns including self-contained oxygen and compressed air, smoke helmets, short-distance fresh air, etc.*



*Contractors to Admiralty, Ministry of Supply, etc.*

*Established 1819*



**TOLWORTH, SURBITON, SURREY**

TELEGRAMS : SIEBE, SURBITON. TELEPHONE : ELMRIDGE 5900





J. SAMUEL WHITE & COMPANY LTD

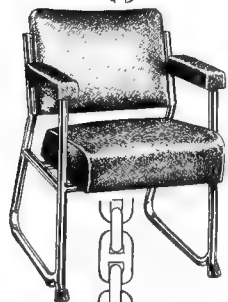
SHIPBUILDERS AND ENGINEERS

COWES, I. OF W.

H.M.S. *Eagle*, one of the Royal Navy's latest and most powerful aircraft carriers, is fitted with **AUTO-KLEAN** strainers on the main fuel and lubricating oil systems and on the hydraulic plant.



# Rustproofed Steel for Ships of War . . .



Chairs and Tables of Tubular Steel are obvious items of furniture for warships.

Specially designed for a life afloat, our range is well worth consideration. Naturally, it lessens fire risk but its structure, too, enhances its comfort and durability. Rust-proofing ensures that its inherent smartness is sustained for a long time.

If furniture is required to your own specifications, our designers will co-operate willingly. Incidentally, we do quite a lot of such work.

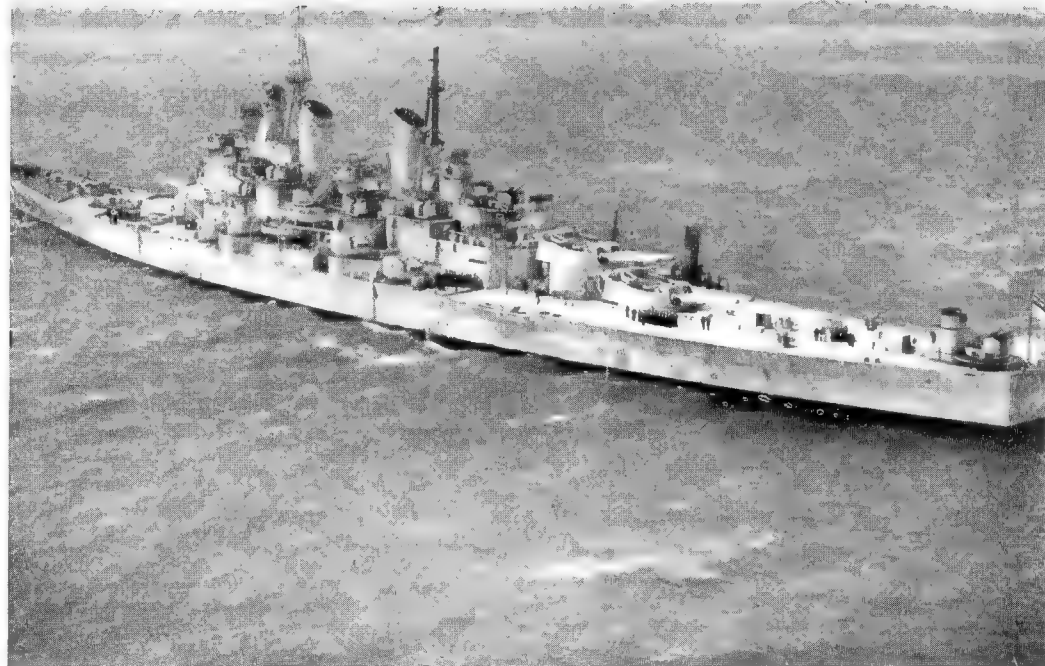
Our technical staff is prepared to discuss the matter fully with responsible persons.

## NEW EQUIPMENT LIMITED

CROXDALE, COUNTY DURHAM

Telephone : Spennymoor 2185

CONTRACTORS TO ADMIRALTY AND MINISTRY OF WORKS



### 'KUNIFER' 30 (cupro-nickel) **CONDENSER TUBES**

continue to give faithful service in

**H.M.S. VANGUARD**, equipped also with **NAVAL BRASS**  
**CONDENSER PLATES**

and **COPPER TUBES**

supplied by the **METALS DIVISION OF I.C.I.**

**IMPERIAL CHEMICAL INDUSTRIES LTD., LONDON, S.W.1**



M.254



HERMES



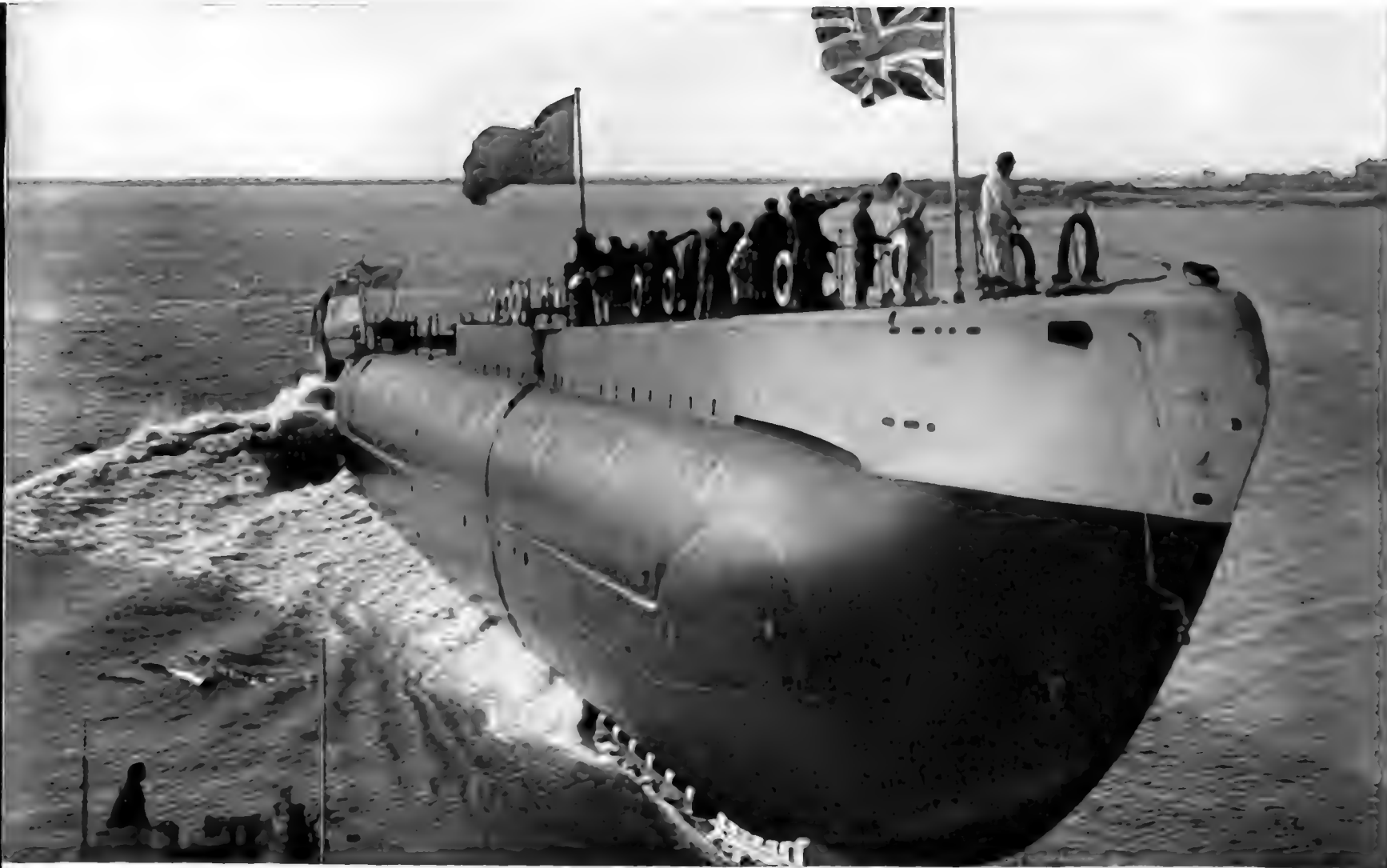
SPARTAN



WIZARD



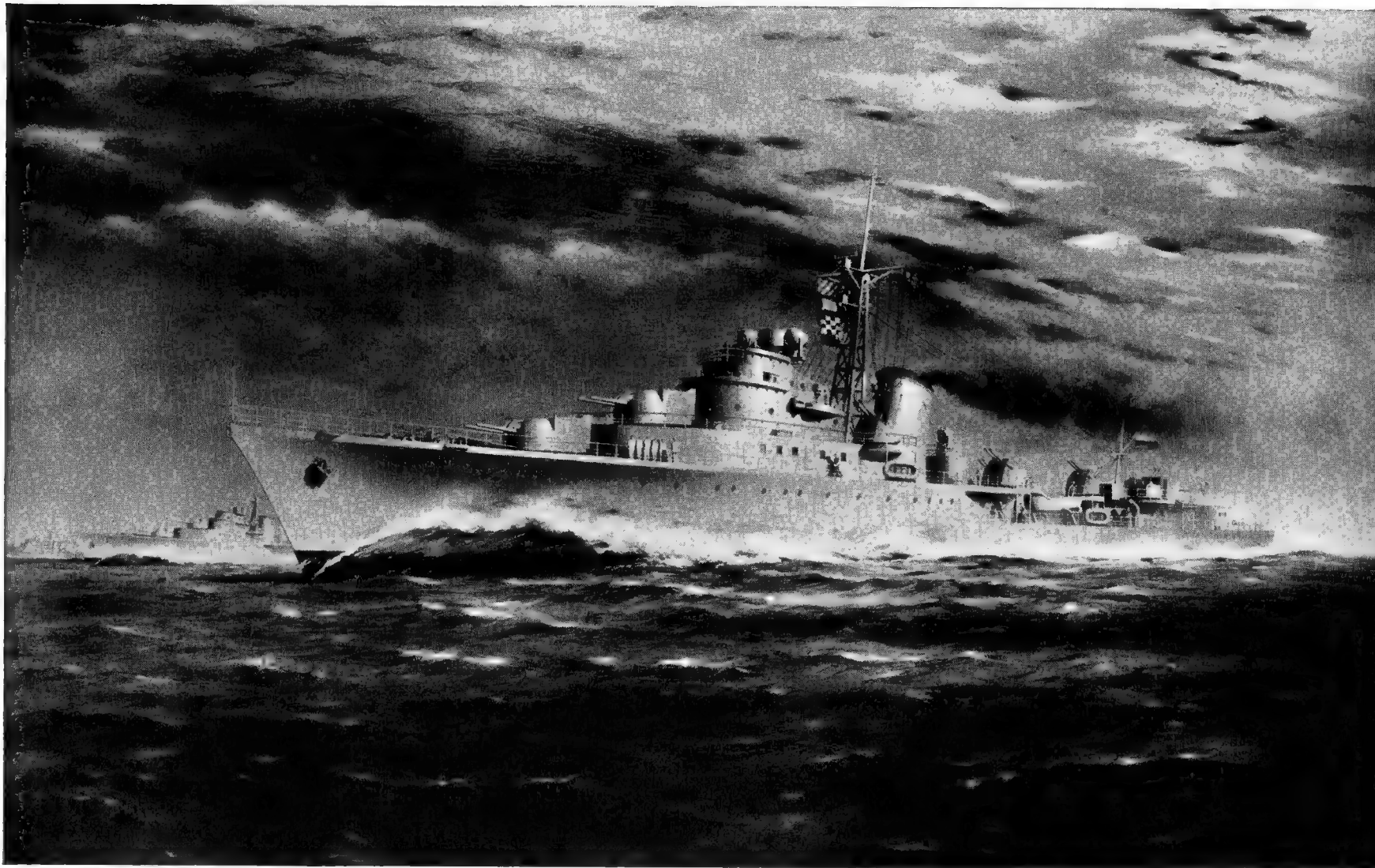
ASTUTE



The Explorer, Britain's latest and most advanced undersea craft, is the first hydrogen-peroxide powered submarine.

**VICKERS - ARMSTRONGS LIMITED**





The Nueva Esparta is the first of three destroyers built for the Venezuelan Navy, and is now operating in her home waters.

**VICKERS HOUSE • BROADWAY • LONDON, S.W.1**



KING GEORGE V



SWIFTSURE



MARNE



L.C.T.

BT 210

## TWO NEW BRITISH FLEET AIRCRAFT CARRIERS



ARK ROYAL (36,800 tons) on trials  
Bow view showing steam catapults and side lift

1954, Charles E. Brown,



CENTAUR (20,330 tons)  
Stern view showing interim ( $5\frac{1}{2}$  degrees) angled deck

1954, Official.

# JANE'S FIGHTING SHIPS

## 1954-55

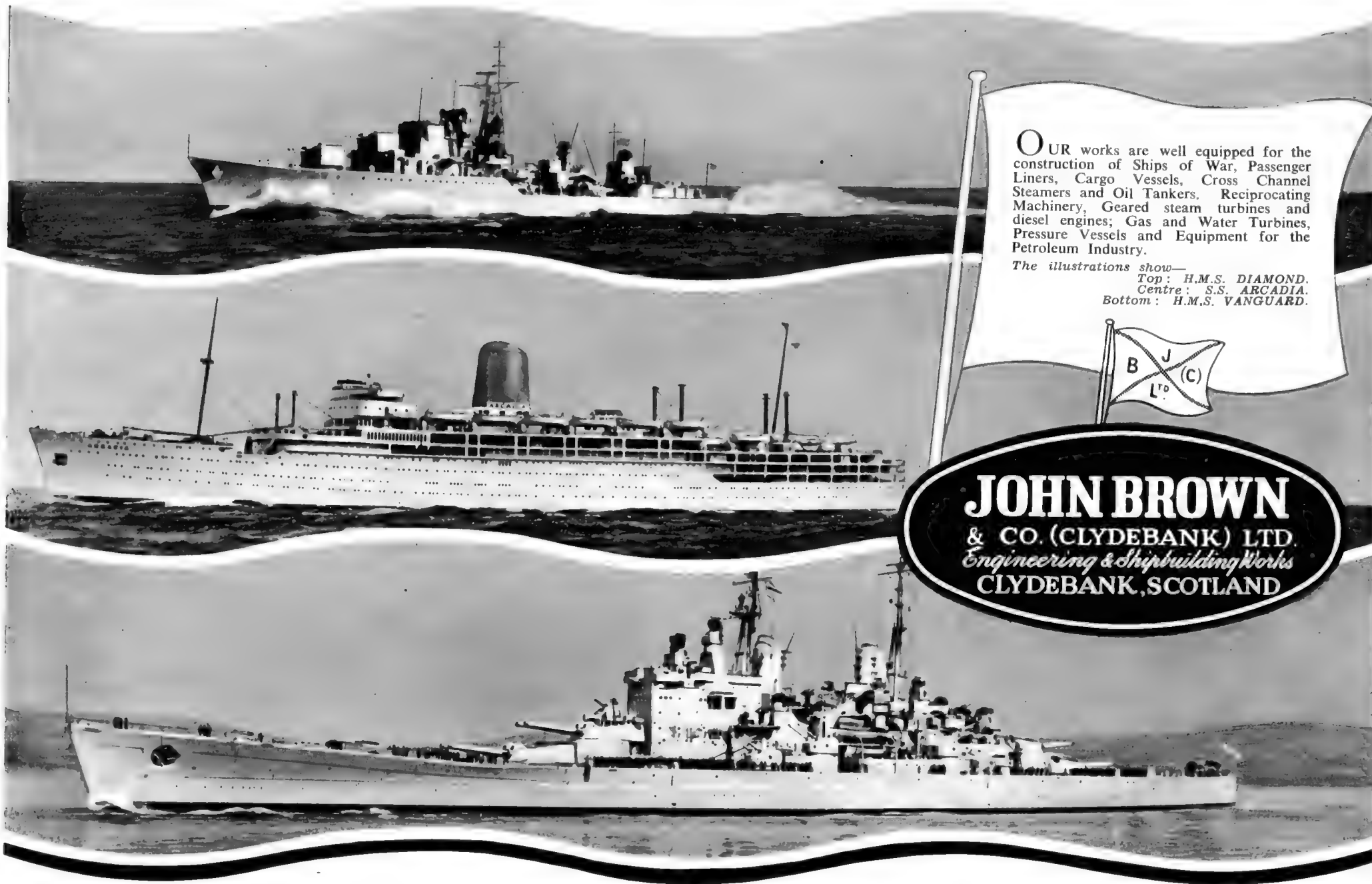
FOUNDED IN 1897 BY FRED T. JANE



Editor:  
RAYMOND V. B. BLACKMAN,  
A.M.I.N.A., A.I.Mar.E.

Publishers:  
THE MCGRAW-HILL BOOK COMPANY Inc.  
330 WEST 42nd STREET  
NEW YORK 18, N.Y.





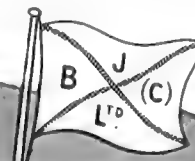
OUR works are well equipped for the construction of Ships of War, Passenger Liners, Cargo Vessels, Cross Channel Steamers and Oil Tankers. Reciprocating Machinery, Geared steam turbines and diesel engines; Gas and Water Turbines, Pressure Vessels and Equipment for the Petroleum Industry.

The illustrations show—

Top: H.M.S. DIAMOND.

Centre: S.S. ARCADIA.

Bottom: H.M.S. VANGUARD.



**JOHN BROWN**  
& CO. (CLYDEBANK) LTD.  
*Engineering & Shipbuilding Works*  
CLYDEBANK, SCOTLAND

# CONTENTS

	Page
ALPHABETICAL LIST OF ADVERTISERS .. ..	5 adv.
CLASSIFIED LIST OF ADVERTISERS .. ..	8 adv.
FOREWORD .. ..	iv
INDEX .. ..	ix

GREAT BRITAIN .. ..	1
Aircraft Carriers .. ..	10
Battleships .. ..	18
Monitors .. ..	21
Cruisers .. ..	21
Fast Minelayers .. ..	29
Destroyers .. ..	31
Frigates .. ..	38
Submarines .. ..	51
Ocean Minesweepers .. ..	56
Coastal Minesweepers .. ..	57
Fast Patrol Boats .. ..	60
Coastal Minelayers .. ..	67
Auxiliaries and Miscellaneous Ships .. ..	69

AUSTRALIA .. ..	82
CANADA .. ..	91
CEYLON .. ..	102
INDIA .. ..	103
NEW ZEALAND .. ..	109
PAKISTAN .. ..	113
SOUTH AFRICA .. ..	117

ARGENTINA .. ..	120
BELGIUM .. ..	131
BRAZIL .. ..	134
BULGARIA .. ..	141
BURMA .. ..	142
CHILE .. ..	144
CHINA (COMMUNIST) .. ..	152
CHINA (NATIONALIST) .. ..	156
COLOMBIA .. ..	164
CUBA .. ..	167
DENMARK .. ..	171
DOMINICAN REPUBLIC .. ..	177
ECUADOR .. ..	183

	Page
EGYPT .. ..	185
FINLAND .. ..	189
FRANCE .. ..	192
Aircraft Carriers .. ..	196
Battleships .. ..	198
Cruisers .. ..	200
Destroyers .. ..	203
Frigates .. ..	206
Submarines .. ..	210
Minesweepers .. ..	212
Patrol Vessels .. ..	214
Coastal Craft .. ..	217
Auxiliaries and Miscellaneous Ships .. ..	218

GERMANY (EAST) .. ..	221
GERMANY (WEST) .. ..	222
GREECE .. ..	224
HAITI .. ..	231
HONDURAS .. ..	231
HUNGARY .. ..	231
ICELAND .. ..	232
INDONESIA .. ..	233
IRAQ .. ..	235
IRISH REPUBLIC .. ..	236
ISRAEL .. ..	237
ITALY .. ..	239
Battleships .. ..	241
Cruisers .. ..	242
Destroyers .. ..	243
Frigates .. ..	245
Submarines .. ..	246
Corvettes .. ..	247
Minesweepers .. ..	248
Coastal Craft .. ..	249
Auxiliaries and Miscellaneous Ships .. ..	250

JAPAN .. ..	252
KOREA .. ..	255
MEXICO .. ..	256
NETHERLANDS .. ..	259
Aircraft Carrier .. ..	261
Cruisers .. ..	261
Destroyers .. ..	263
Frigates .. ..	264
Submarines .. ..	267
Minesweepers .. ..	268

	Page
NORWAY .. ..	271
PANAMA .. ..	278
PARAGUAY .. ..	278
PERSIA (IRAN) .. ..	279
PERU .. ..	280
PHILIPPINES .. ..	285
POLAND .. ..	287
PORTUGAL .. ..	290
ROUMANIA .. ..	297

RUSSIA (U.S.S.R.) .. ..	300
Battleships .. ..	303
Cruisers .. ..	305
Destroyers .. ..	309
Frigates .. ..	313
Submarines .. ..	316
Patrol Vessels .. ..	320
Minesweepers .. ..	321
Minelayers .. ..	323
Motor Torpedo Boats .. ..	324
Coastal Craft .. ..	325
Auxiliaries and Miscellaneous Ships .. ..	326

SPAIN .. ..	333
SWEDEN .. ..	345
THAILAND .. ..	356
TURKEY .. ..	362

U.S.A. .. ..	371
Aircraft Carriers .. ..	378
Battleships .. ..	388
Large Cruisers .. ..	393
Heavy Cruisers .. ..	395
Light Cruisers .. ..	400
Destroyers .. ..	406
Destroyer Escorts .. ..	406
Submarines .. ..	422
Patrol Vessels .. ..	430
Minesweepers .. ..	432
Auxiliaries and Miscellaneous Ships .. ..	434
Coast Guard .. ..	453

URUGUAY .. ..	459
VENEZUELA .. ..	461
VIET NAM .. ..	463
YUGOSLAVIA .. ..	464
ADDENDA .. ..	469

# D. H. 110

(TWO ROLLS-ROYCE AVON JET ENGINES)

The de Havilland 110 two-seat day-and-night jet fighter carries comprehensive "all-weather" radio and radar aids and has a performance comparable to that of any fighter of the new generation.



THE DE HAVILLAND AIRCRAFT COMPANY LIMITED,  
HATFIELD AERODROME, HERTFORDSHIRE, ENGLAND.



# FOREWORD

The amount of fresh material in this, the 56th edition of "Fighting Ships," is considerably above the normal. Not only have numerous additions been made to the technical data and notes, but some 535 up-to-date illustrations (380 photographs and 155 drawings) have been inserted either of new or converted warships, or in replacement of older illustrations, bringing the number of illustrations in the annual up to a total of well over 2,500.

The frontispiece this year features two of Great Britain's latest aircraft carriers, H.M.S. *Ark Royal*, which embodies three post-war developments, namely, the steam catapult, the side lift and the angled deck, and is the largest aircraft carrier built in the United Kingdom; and H.M.S. *Centaur*, the first of a new intermediate category of fleet aircraft carriers fitted with the angled deck.

Evidence will be found in this issue of the increasing application of the latest scientific and engineering developments to the new warships of the major maritime powers. Examples are: high speed turbines using much higher steam pressures and temperatures than hitherto and giving increased performance with lighter weight; light weight diesel engines; gas turbines weighing one-sixth less but delivering two-thirds more power than conventional power plants; atomic powered engines; hydrogen peroxide plants; steam catapults; and gun mountings, gun controls and weapons which are becoming separate engineering installations in themselves. With the increasing use of the latest scientific developments the demand for the services of fully qualified engineers and their necessary long period of training is presenting the authorities with a very serious problem, which will have to be solved if full and efficient use is to be made of the new machinery and weapons which are being installed.

The United States Navy appears to be adopting these new technological advances somewhat more rapidly than any other, whether they have resulted from American developments as is the case of the atomic engine and the very high pressure steam turbine or, like the angled deck and steam catapult, first developed and used by the British Navy.

The launching of guided missiles from warships is now a *fait accompli* as far as the United States is concerned, but considerable further development of these weapons and study of their strategical and tactical use are required

before any final decision can be made as to the most suitable sea-going launching platform. For long range surface-to-surface missiles a new type of battleship may be developed, specially designed to carry a large number of the weapons with all the necessary control apparatus, and sufficiently heavily armoured to give protection against similar weapons used by the enemy.

Shorter range missiles could be launched from existing categories of ships down to submarines, either completely converted to guided missile ships or adapted to retain some part of their existing armament to close range operation.

This adaptation of existing ships is what is now happening in the United States Navy where an old battleship, three heavy cruisers, a large carrier and several submarines have been converted, either wholly or in part, to launch these weapons. In the British Navy the first guided missile trials ship is fitting out. The closer co-operation recently agreed between Great Britain and the United States should accelerate the development of what is likely to become an important factor in naval warfare.

However, in spite of all the developments of these weapons and the controversy which surrounds them, much thought and energy is being directed towards existing weapons. Guns with three times the previous rate of fire, anti-aircraft pieces of greater efficiency, more deadly anti-submarine weapons, new kinds of torpedoes and more destructive mines of several types have become available, and naval aircraft specifically designed for naval requirements and flown from aircraft carriers are still one of the best means of dealing with enemy submarines.

Giant aircraft carriers continue to be built, frigates and anti-submarine escorts are at a premium, and minesweepers are emerging from the shipyards in large numbers together with many hundreds of small craft and specialist warships.

Among the many photographs added to the Great Britain section are those of the new aircraft carriers *Ark Royal*, *Albion* and *Centaur*, the light carrier *Warrior* after alterations, the destroyers *Chaplet* and *Comet* after being refitted as minelayers and anti-submarine escorts, the *Grenville* after full conversion from a destroyer to a fast anti-submarine frigate, the frigate *Loch Alvie* after

being re-armed and modernised, the new submarine *Explorer*, the rebuilt submarine *Truncheon*, the new survey ship *Vidal*, the radio trials ship *Fleetwood*, the new inshore minesweeper *Aveley* and the new seaward defence boat *Shalford*.

New plan and elevation drawings in the Great Britain section include those of the aircraft carriers *Ark Royal*, *Eagle* and *Illustrious*, and there are new silhouette drawings of the aircraft carriers *Ark Royal*, *Eagle* and *Warrior*, the trials cruiser *Cumberland*, and a number of destroyers, frigates and other ships.

As regards new construction in Great Britain, of the ten larger warships constituting the back-log of the Second World War programme the large fleet aircraft carrier *Ark Royal*, begun in May 1943 and launched in May 1950, is structurally completed but still on trials and is expected to come into operational service in 1955; three of the four intermediate fleet aircraft carriers laid down in 1944-45, the *Albion*, *Centaur* and *Bulwark*, have been completed (the latter being still on trials) but the *Hermes* has progressed little since she was launched in February 1953; the light fleet aircraft carriers *Hercules* and *Leviathan* laid down in 1943, launched in 1945 and stopped early in 1946 when structurally almost complete, are still suspended and laid up; and the cruisers *Blake*, *Defence* and *Tiger*, laid down in 1941-42, launched in 1944-45 and stopped in 1946 are still suspended as far as constructional work is concerned, it is officially stated, although work in relation to the preparation of equipment is being progressed; the future armament of these ships is dependent on research now being carried out, but it is known that although they will carry only four 6-inch guns as compared with the nine in earlier ships of which they were originally sisters these guns will have a rate of fire practically three times that of any similar calibre gun now in service. The last two of the "Daring" class ships originally rated as destroyers, the *Delight* and *Diana*, ordered during the war and laid down in 1946-47, have been completed and have joined the Fleet.

No aircraft carriers, no battleships, no cruisers, no destroyers and no large warships of any kind have been ordered in Great Britain for the Royal Navy since the end of the Second World War in 1945.

The Royal Navy now comprises 17 aircraft carriers



# RED HAND COMPOSITIONS

“Red Hand” Underwater Protectives and Anti-foulings are supplied to the Admiralty for use on Her Majesty’s Ships

“RED HAND” COMPOSITIONS AND SURFACE COATINGS FOR THE PROTECTION OF EVERY TYPE OF  
VESSEL BELOW AND ABOVE THE WATER-LINE

*Owners, Builders, Marine Superintendents, Naval Architects and Marine Consultants are invited to apply for the publication “Red Hand Underwater Compositions and Marine Paints” which includes a specification of surface coatings for new tonnage together with details of the best type of materials, both protective and decorative, for floating craft of all descriptions.*

## THE RED HAND COMPOSITIONS CO.

*Makers of fine quality Ships Compositions and Marine Paints since 1865*

Telegrams : RAHTJENS PHONE LONDON

Head Office: 15 CLIFFORD STREET, LONDON, W.1  
Telephone No.: REGENT 3416-9

City Office: 14 BILLITER STREET, LONDON, E.C.2  
Telephone No.: ROYAL 1497

BRANCHES: CARDIFF GLASGOW LIVERPOOL NEWCASTLE-ON-TYNE SOUTHAMPTON



## FOREWORD—continued

(including two ferry carriers), five battleships, 24 cruisers, 82 destroyers, 180 frigates, 57 submarines, two monitors, three fast minelayers, 195 minesweepers and numerous small craft and auxiliaries.

Of the rearmament programme embarked upon in 1951, the largest ships under construction are frigates. Progress on these frigates and on the minesweepers, seaward defence boats and fast patrol boats also ordered, has been less rapid than hoped, partly owing to production difficulties which are being overcome, and partly owing to problems inevitable with ships of new design. The first of the frigates is expected to be completed in the 1954-55 financial year, and by the end of that year more than 100 coastal and inshore minesweepers should have been completed as well as almost all the seaward defence boats.

It is officially stated that 25 frigates are in course of construction. These are of four types comprising: first rate "quality" fast anti-submarine frigates, second-rate "utility" anti-submarine frigates, anti-aircraft frigates, and aircraft direction frigates. But all will bear a family resemblance to each other in that in contrast to the clean-swept profile of former vessels of the destroyer and frigate category they will have an unorthodox fore-castle rising to a bulwark on the bows presenting an unusual appearance but nevertheless affording protection to both equipment and personnel alike in a seaway.

Of the aircraft direction type, armed with two 4.5-inch guns and two smaller weapons and driven by Admiralty standard range diesel engines, the *Salisbury* is nearing completion at Devonport; of the second rate anti-submarine frigates armed with three Bofors guns and two three-barrelled anti-submarine mortars of the same design as those fitted in H.M.S. *Rocket*, and driven by a steam turbine installation, the *Dundas* and *Hardy* are in an advanced stage of fitting out; of the larger first rate fast anti-submarine frigates armed with two 4.5-inch guns, two smaller weapons and the latest "Limbo" anti-submarine weapons of post-war development, and propelled by two sets of steam turbines, the *Torquay* and *Whitby* were launched in July; and of the anti-aircraft frigate type armed with four 4.5-inch guns in mountings the same as those in H.M.S. *Daring*, two anti-aircraft guns and a "Squid" anti-submarine mortar and driven by diesels, the *Puma* was launched in June and the *Leopard* is under construction in Portsmouth Dockyard. Designed primarily for the protection of convoys against aircraft the latter type will also serve as a smaller type of destroyer in offensive operations, in fact now that

Britain has stopped building destroyers known as such, this type is the nearest approach to destroyers that will be seen in the Royal Navy for some little time.

A number of new submarines are under construction. In addition to those of orthodox type with conventional diesel machinery and design based on the experience of the last war and all the research and development that has been carried out since, two experimental submarines using high test peroxide propulsion to provide high under-water speed are nearing completion and are expected to undergo sea trials this year. The first submarine of this new streamlined type with propulsive machinery of novel design, H.M.S. *Explorer*, took the water in March, the first submarine to be launched for the Royal Navy since the completion of the war programme "A" class submarines. New and improved midget submarines will also be completed this year. Progress has also been made in another field of submarine development, the continued study of nuclear propulsion.

In addition to new construction the programme for modernising, reconstructing and converting existing warships has been continued. By far the biggest unit involved is the fleet aircraft carrier *Victorious* which was taken in hand in 1950, and although something of her new shape can now be discerned, so near is her conversion to 100 per cent rebuilding that it will probably be not before the end of 1957 when she emerges from H.M. Dockyard, Portsmouth, to join the Fleet. Of the 45 fleet destroyers scheduled for full or limited conversion into fast anti-submarine frigates some 35 will have been completed or taken in hand by the end of the year. Many submarines have been modernised, some, notably of the "T" class, having been rebuilt and converted out of all recognition.

H.M.S. *Grey Goose*, a steel hulled gunboat built during the war on the pattern of a miniature destroyer and formerly engined with steam turbines, has been converted to gas turbine propulsion with two Rolls Royce R.M. 60 units and reconstructed with twin funnels athwartships.

On the debit side, now that the hostilities in the Far East are over the mournful procession of British warships to the shipbreakers, which was continuous after the ending of the Second World War but was temporarily arrested on the outbreak of war in Korea, is now being continued. Two ferry aircraft carriers, the *Pioneer* (formerly known as a maintenance carrier) and *Campania* (formerly rated as an escort carrier), and nine frigates, the *Dovey*, *Nene*, *Rother*, *Swale*, *Tavy*, *Tees*, *Test*, *Teviot* and *Wye*, are among the ships being scrapped.

Australia's second light fleet aircraft carrier *Melbourne* is still under construction in Great Britain, her completion having been delayed by the superimposing of a second re-casting of her design to embody the angled deck and steam catapults on the initial reconstruction and modernisation of the ship laid down in 1943 and launched in 1945 but never completed to the original plans. Australia's two heavy cruisers *Australia* and *Shropshire* have been scrapped and the Commonwealth now has no cruisers except the light cruiser *Hobart* being converted into a training ship. The construction of the *Waterhen*, originally projected as a destroyer of the "Daring" class, has been cancelled, and only three ships of this type are now to be built. Only four of the six proposed new construction fast anti-submarine frigates are to be proceeded with. And only four of the five "Q" class fleet destroyers have been converted or are being converted into fast anti-submarine frigates. A photograph of the "Quadrant" as reconstructed appears in this issue.

Canada also has a light fleet aircraft carrier, the *Bonaventure*, under construction in Great Britain, but this ship will not be ready for some time because the plans of the vessel begun in 1943 and launched in 1945 but suspended from 1946 to 1952 have been revised to provide for a completely modern aircraft carrier with the angled deck and steam catapults. In Canadian shipyards 14 anti-submarine destroyer escorts of the fast frigate type are in various stages of construction, the seven "Tribal" class destroyers have been modernised and rearmed for anti-submarine warfare, the *Algonquin* (photographs in this issue), fully converted from a destroyer into a fast anti-submarine escort, has joined the Fleet, and of the 21 "River" class frigates scheduled for anti-submarine conversion nine have been completed or are nearing completion (see photograph of *Prestonian*), and for those who have hitherto recognised this class on sight the modernised Canadian "Rivers" present an unfamiliar silhouette with the fore-castle decks extended right aft.

India has purchased from Great Britain the cruiser *Nigeria* and for the next two years she will be under refit in Great Britain. The three "Hunt" class frigates acquired from Great Britain and re-rated as destroyers are illustrated in this issue.

Pakistan has acquired the destroyer *Chivalrous* from Great Britain, and on transfer she was renamed *Taimur*.

South Africa has acquired one of Britain's seaward defence boats of the new construction programme.

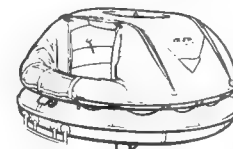
Turning to the United States Navy, 33 new warships and over 1,000 small craft are to be built under the





# NAVAL LIFESAVING APPARATUS

**TYPE MM  
MK. I  
DINGHIES**



6, 10 and 20-men dinghies, launched in valise from any part of the vessel under any conditions. Automatically inflated complete with double-skinned exposure protection canopy. Packed with all emergency equipment and aids to survival—rations, first-aid, recognition light, pyrotechnics, etc.



## LIFEJACKET

**TYPE 50 N MK. 6b**

Self-righting lifejacket of single chamber type, donned and automatically inflated in a matter of seconds. Stowed in pouch on stout waist belt, the jacket is fitted with sea-cell light, whistle, line and toggle and hoist strap. It has proved safe to jump from 32 ft. inflated or deflated.

*Literature from:*

**R.F.D. COMPANY LIMITED  
GODALMING, SURREY, ENGLAND**

and at Dunmurry, Co. Antrim, Northern Ireland. Also R.F.D. (Canada) Ltd., Granby, Quebec; R.F.D. (Australia) Co. Pty. Ltd., Melbourne, Australia; R.F.D. (Africa) Pty. Ltd., Germiston, Transvaal.

## FOREWORD—continued

construction programme for the 1955 fiscal year (1 July, 1954, to 30 June, 1955). The major warships include a fourth giant aircraft carrier of 60,000 tons displacement (76,000 tons full load), five more super destroyers, eight new destroyer escorts, two more atomic powered submarines and two large submarines of conventional design.

Even without this projected new construction and ships being built under the programmes of the last two or three years, the United States Navy is a colossal fighting force constituting the largest peacetime fleet ever maintained by any country and equal to all the major navies of the world put together. The U.S. Navy includes 101 fleet and escort aircraft carriers, 15 battleships, 75 cruisers, 737 vessels of the destroyer and destroyer escort type, 200 submarines, 347 minelayers and minesweepers, 150 patrol vessels, and 3,375 auxiliary ships, amphibious vessels and service craft, a total of 5,000 vessels.

The U.S.S. *Forrestal*, first of the giant aircraft carriers, the largest ever built, is nearing completion, the *Saratoga* is in an advanced state of construction, the *Ranger* is about to be laid down, and the construction of a fourth ship, CVA 62, has been assigned. The United States Navy has long-term plans to bring the number of aircraft carriers of this type up to ten. Instead of the flush deck and retractable bridge of the original design the "Forrestal" class will now have the usual island superstructure and the angled deck. Of existing U.S. aircraft carriers the *Franklin D. Roosevelt* and *Midway*, hitherto the largest built by any country, and a number of the large aircraft carriers of the "Essex" class are being reconstructed and modernised with the angled deck to conform with new construction. An escort carrier is to be converted into a helicopter carrier to be used by the Marine Corps in amphibious landings.

The conversion of the heavy cruisers *Boston* and *Canberra* to guided missile ships is nearing completion, the after gun turrets having been replaced by two launching platforms and rocket installations for "Terrier" missiles at a cost of \$30,000,000 for both. A sister ship, the *Los Angeles*, is also to be converted to a guided missile ship but with no change in the present armament.

Eleven outside destroyers of the "Forrest Sherman" class are now under construction or projected. These will benefit from the engineering experience gained with the four new destroyer leaders of the "Mitscher" class and the experimental destroyer *Timmerman*, in all of which the propelling machinery, more powerful and of lighter weight, includes many novel or advanced engineering features and employs steam pressures working up to

2,000 lbs. per sq. inch and temperatures up to 1,050 degrees of superheat.

Thirteen destroyer escorts of more normal size, akin to frigates, are also under construction or projected. These "Dealey" class ships will be lavishly equipped with electronic gear and anti-submarine weapons. Two suspended destroyer escorts are to be completed as radar pickets.

Four "Liberty" hull cargo vessels are also to be converted into radar pickets. A new concept in Navy ship-building plans, these radar picket vessels are primarily for use in the continental defence system.

The planned U.S. construction and conversion programme for the 1955 fiscal year provides for replacing the diesel engines in the destroyer escorts *Mills* with two British Rolls Royce R.M. 60 gas turbines which are expected to reduce the propelling plant weight by approximately 15 per cent while delivering about 67 per cent more power.

The two American nuclear-powered submarines *Nautilus* and *Sea Wolf* are now nearing completion. It appears that they will be much larger than was at first anticipated with three deck levels and propelled by either atomic power, diesel engines or electric motors. A very high submerged speed is expected. Two more nuclear-powered submarines are projected, as well as two submarines with conventional diesel propulsion. Other submarines of the high speed attack, radar picket, auxiliary and midget types are under construction.

Large numbers of minesweepers, amphibious vessels, and highly specialised auxiliaries to which types the United States Navy gives much attention, are also under construction or conversion in American shipyards.

Among the photographs added to the U.S. section are those of the new tactical command ship *Northampton*, the large destroyer leader *Norfolk*, the converted radar picket destroyer *William R. Rush*, the anti-submarine escort *Peterson*, the new tank landing ship *LST 1158*, the new cable repair ship *Neptune*, and the new Coast Guard patrol boat *WPB 95304*. There are also new plan and elevation drawings of the *Northampton* and new silhouettes of that and other ships.

Russia is building up substantial forces of cruisers, destroyers, and submarines. The number of new "Sverdlov" class cruisers, of two slightly different types, is 12 completed or being completed, with another six under construction. With these Russia has 26 cruisers and will have 32 in the near future. A photograph of the new cruiser *Admiral Ushakov* appears in this issue.

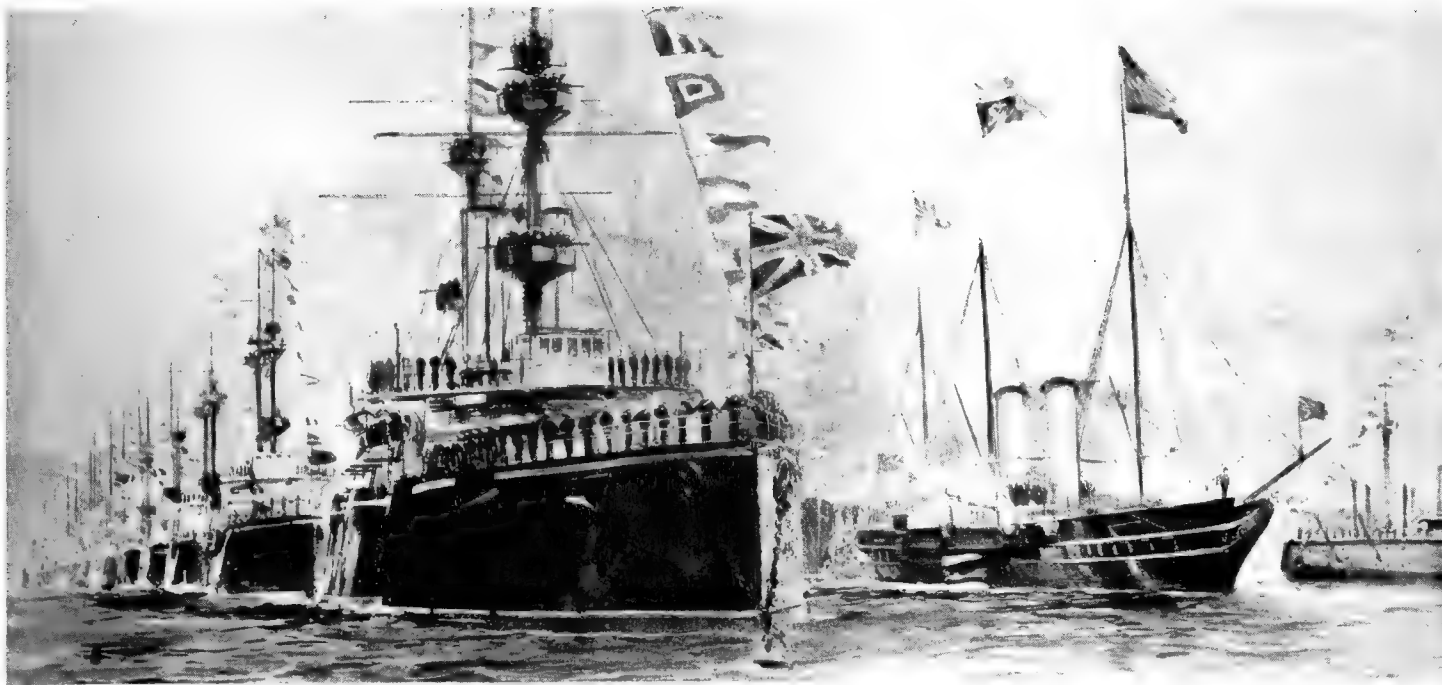
Among new Russian destroyers are 58 of the "Skori" class (two photographs on page 309) with another 10 under construction, and 15 of the "Ognevoi" class. These bring the number of Russian destroyers up to 138.

A large number of ocean-going long-range Russian submarines are now known to have been completed and commissioned for service recently. These new construction submarines are of two types. The large and fast type are of a design similar to that of the former German types XI and XXI with a submerged displacement of 2,900 tons, a speed of 20 knots and a range of 20,000 miles. This class has been seen in considerable numbers in the Baltic and Far East, and the estimated rate of construction is believed to be in the region of 18 to 20 annually. The other type is of medium size with a submerged displacement of 1,600 tons, a speed of 17 knots and a range of 13,000 miles. Units of this class have been seen in the Far East and more are under construction in yards throughout the Soviet Union (for data see page 316). The number of Russian submarines is variously estimated at between 370 and 400.

The Russian Navy is now capable of a considerable mine-laying effort. In addition to specialised minelayers, most cruisers and destroyers, some submarines, and other craft, are fitted for mine-laying, which has always been a highly specialised branch of the Russian Navy.

France is to build a large light fleet aircraft carrier named *Clemenceau* with exceptional length and width (including the angled deck) for her displacement of 22,000 tons. The 1954 French new construction programme also includes three frigates of a new type, two large submarines and two killer submarines. The construction of the anti-aircraft cruiser *Colbert* has been started, but the trials of the new anti-aircraft cruiser *De Grasse* have been delayed by her dock accident. Several of the 17 large new destroyers of the "Surcouf" class have been completed, the remainder being in various stages of construction. And the first of the 13 new anti-submarine frigates are also about to enter service. Among the recent photographs of French warships added to this issue are those of the aircraft carrier *Bois Belleau*, acquired from the United States last year, the new destroyer *Surcouf*, the recently completed submarine *Artemis*, and the new coastal minesweepers *Coquelicot* and *Vega*.

Italy is continuing to build up her submarine force and two large submarines, renamed *Enrico Tazzoli* and *Leonardo da Vinci* have been acquired from the United States. Two large destroyers, three anti-submarine



Reproduced by courtesy of "The Illustrated London News" from their issue of July 3rd, 1897.



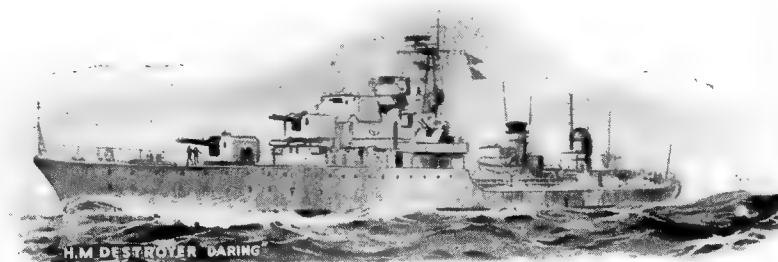
**BABCOCK & WILCOX LTD., BABCOCK HOUSE, FARRINGTON STREET, LONDON, E.C.4**



**L**ESS than a year after the Naval Review celebrating Queen Victoria's Jubilee, H.M.S. *Sheldrake* was refitted at Chatham. She was a torpedo-gunboat of 735 tons displacement and the purpose of her refit was to replace her locomotive-type boilers by water-tube units manufactured by Babcock & Wilcox; for "The Battle of the Boilers," between the supporters of the cylindrical and various water-tube types was at its height. The tests carried out with *Sheldrake* and her larger sisters *Hermes* and *Espiegle* were a decisive factor in the report of the Admiralty Committee on Boilers, issued in 1904, which was to lead to the adoption of Babcock boilers for a long and impressive line of naval vessels, many of whose names have resounded in the Nation's history.

In the post-war years Babcock boilers have been specified for the new building programme of the Royal Navy, including such outstanding recent vessels as *Daring*, *Delight*, *Diana* and *Decoy* and for all the newest anti-submarine frigates.

The boiler plant of *Sheldrake* and of all these new vessels shares a common ancestry. The link between the Royal Navy and Babcock & Wilcox, forged fifty-seven years ago, remains unbroken.





## FOREWORD—continued.

frigates, three corvettes and 37 coast minesweepers are in an advanced state of construction. The cruiser *Raimondo Montecuccoli* has undergone reconstruction, and the light cruisers *San Giorgio* and *San Marco* are under conversion to anti-submarine leaders. Among the new photographs in the Italian section are those of the converted fast anti-submarine escorts *Granatiere* and *Grecale*, the reconditioned submarines *Giada* and *Vortice*, the fast minesweeper *Giuseppe Abba* and the coastal minesweeper *Acacia*.

After modification with tripod mainmast before instead of abaft the second funnel the new Netherlands cruisers *De Ruyter* and *De Zeven Provinciën* have entered service; and the first two of the large new destroyers of the "Holland" type have been completed. Ten more destroyers, four submarines, seven escort vessels, five submarine chasers, six ocean minesweepers and 32 coastal minesweepers are under construction. The aircraft carrier *Karel Doorman* is being reconstructed and modernised. Among the photographs added in the Netherlands section are those of the new cruisers *De Ruyter* and *De Zeven Provinciën*, the new destroyer *Holland*, the frigate *Willem van der Zaan* (ex-minelayer) and more recent views of all the other Netherlands frigates, the submarine *Zeeleeuw* acquired from the United States, and the new coastal minesweeper *Bedum*.

Sweden is completing two new large destroyers of the "Halland" class, and four more destroyers, six submarines, a minelayer, eight minesweepers and 25 motor torpedo boats are under construction. On page 352 is a photograph of the remarkable new German-built large motor torpedo boat *Plejad* constructed for the Royal Swedish Navy by Lurssen of Bremen which carries six 21-inch torpedo tubes as well as guns at a high speed and is claimed to be "atom-proof."

Spain has completed the submarine *D3*, and 12 destroyers, six corvettes, four submarines, six minesweepers and six motor torpedo boats are being completed or are in various stages of construction.

Turkey has acquired two more large ocean-going submarines from the United States.

Peru has taken delivery of the submarines *Lobo* and *Tiburón* (photographs in this issue), built in the U.S.A.

Nationalist China has acquired two destroyers, ten patrol vessels and other craft from the United States. In the Chinese section are 23 new silhouette drawings of Communist and Nationalist warships.

Under the Japanese-United States Mutual Security Agreement 17 American warships, including two

destroyers and two destroyer escorts, are to be transferred to Japan to augment the 18 frigates and 50 gunboats already acquired from the United States.

Venezuela has taken delivery of the new destroyer *Nueva Esparta* (photograph in this issue), built in Great Britain. A sister ship and a larger destroyer are also under construction in Great Britain. Nine fast anti-submarine frigates or light destroyer escorts are being built in Italy and 12 coastguard vessels have been ordered in France.

In the Yugoslavia section nine new photographs and additional information on an expanding navy have been supplied by the naval authorities.

The Editor would like to express his warm appreciation of the assistance given by Captain T. D. Manning, C.B.E., V.R.D., R.N.V.R. (Retd.), in the selection of new photographs, which has been a particularly heavy task this year; Mr. C. W. E. Richardson in preparing the new drawings; and Mr. A. Hague in general.

For its revision this year "Fighting Ships" is much indebted to the several Naval Boards, Navy Departments and Ministries of Marine and Defence who furnished information and photographs. In most instances this was facilitated by the kindness of the Ambassadors and Naval Attachés in London. The following may be particularly mentioned: Lieut.-General Bogdan Orescanin, Naval Attaché, Yugoslavian Embassy; Rear-Admiral José E. Rodríguez Calderón, Chief of Staff, Cuban Navy; Rear Admiral César de Windt Lavandier, Chief of Naval Staff, Dominican Navy; Rear-Admiral Y. M. R. Le Hagne, French Navy; Rear-Admiral E. Giuriati, Italian Navy; Commodore G. S. Tham, Royal Swedish Navy; Captain B. F. Benesch, Argentine Navy; Captain C. Paraguassu de Sa, Brazilian Navy; Captain Angel C. Lira, Chilean Navy; Captain J. T. B. Munter, Royal Danish Navy; Captain A. Athanasiou, Royal Hellenic Navy; Captain P. A. Muloch van der Vlies Bik, C.V.O., Royal Netherlands Navy; Captain L. H. R. Lund, D.S.C., Royal Norwegian Navy; Captain Jesús Fontán Lobé, Spanish Navy; Captain Sawasdi Kongsiri, Royal Thai Navy; Captain Mahmut Ulseven, Turkish Navy; Colonel E. Delellenne, Naval Attaché, Belgian Embassy; Colonel K. Salmon, Naval Attaché, Israeli Navy; Senior Commander J. N. Milheirico, Portuguese Navy; Commander Ricardo Azuero Vargas, Colombian Navy; and Lieut.-Colonel F. O. Seeve, Naval Attaché, Finnish Legation.

Acknowledgment is made of the courtesy of Captain A. W. Clarke, C.B.E., D.S.O., R.N. (Retd.), Chief of Naval Information, London, and of Commander Richard

B. Franklin, U.S.N., Chief, Navy Section, Office of Public Information, Washington.

The revisions furnished by Captain (S) M. A. Davidson, C.D., R.C.N., Naval Secretary, Canadian Department of National Defence, Ottawa, and Captain J. Plunkett-Cole, R.A.N., Australian Director of Naval Intelligence, Melbourne, are also gratefully acknowledged.

Thanks are also due to Captain G. S. Kapoor, I.N., Indian Naval Adviser, London; and Captain A. R. Khan, R.P.N., Pakistan Naval Adviser and Naval Liaison Officer, London.

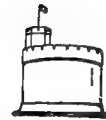
To M. Henri Le Masson, Editor of "Flottes de Combat"; Herr Alexander Bredt, Editor of "Weyers Flottentaschenbuch"; Vice-Admiral Giuseppe Fioravanzo, Editor of "Rivista Marittima"; Captain Allan Kull, Editor of "Marinkalendar"; and Mr. Nils Ericson, Editor of "Sveriges Flotta," our warmest thanks are due for information or photos furnished.

Private correspondents who have assisted this year include: Ing. Luigi Accorsi; Rear-Admiral M. J. Adam, C.V.O., C.B.E.; Mr. K. Jack Bauer; Mr. J. Burgess; Mr. P. E. Burke; Mr. Ian L. Buxton; Mr. Thomas J. Caffrey; Mr. K. F. Caldwell; Mr. Larry R. Cote; Mr. B. L. Devenish-Meares; Lieut. Aldo Fraccaroli; Mr. Hajime Fukaya; Lieut. Alvin H. Grobmeier; Dr. Erich Gröner; Mr. Martin E. Holbrook; Dir. Ossi Janson; Mr. J. W. Kennedy; Mr. Maurice Lebigre; Mr. K. Long; Mr. A. J. McGuinness; M. Jurg Meister; Mr. C. Parsons; Mr. Ian S. Pearsall; Mr. Cemaleddin Saracoglu; Mr. R. M. Scott; Engineer Commander Aluino Martins da Silva; Captain R. Steen Steenson, R.D.N.; Mr. Matthew Thomlinson; Mr. Godfrey H. Walker; and many others who prefer to remain anonymous.

No illustration may be reproduced without the express permission of the Publishers; but the Press may reproduce at sight provided the Publishers are advised and "Janes' Fighting Ships" is fully acknowledged. Photographs credited to professional photographers are their own copyright property and should not be reproduced without their permission.

Those who notice errors, omission or discrepancies, or who have photographs or information to impart for the next edition, the preparation of which starts immediately, are invited to write as early in the year as possible, preferably not later than March, to the Editor, "Fighting Ships," care of Messrs. Sampson Low, Marston & Co., Ltd., 25, Gilbert Street, London, W.1, England.

The Publishers.



MADE AND PRINTED IN GREAT BRITAIN BY  
GROVES, BRODIE & CO., LTD., AT THE WINDSOR PRESS,  
TRADING ESTATE, SLOUGH, BUCKINGHAMSHIRE.

# MITSUBISHI ZOSEN

# 100

## YEARS

HISTORY OF  
SHIPBUILDING

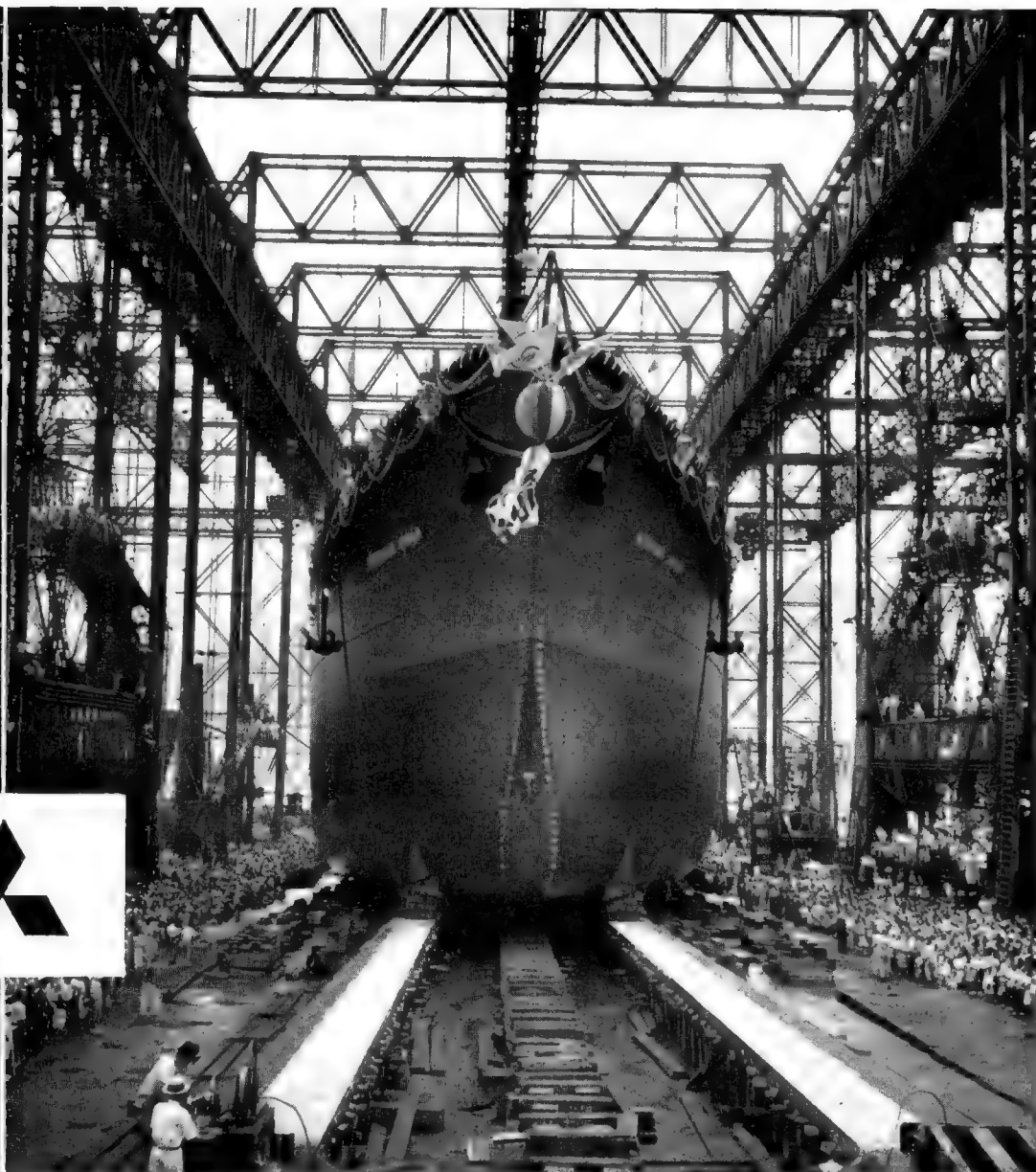
500,000 Displace-  
ment Tonnage War  
Ships

2,000,000 Gross  
Tonnage Merchant  
Ships

Built by  
"MITSUBISHI"



Launching of the Super Tanker  
"STANVAC JAPAN". One of two  
vessels for Messrs. Standard  
Vacuum Transportation Co., Ltd.



**MITSUBISHI SHIPBUILDING  
& ENGINEERING CO., LTD.**

TOKYO, JAPAN

**SHIPBUILDERS · SHIP REPAIRERS · ENGINEERS**

### HEAD OFFICE

No. 1, Shiba, Kotohiracho,  
Minatoku, Tokyo.

Cable Address:  
"DOCKMITSUBISHI" Tokyo.

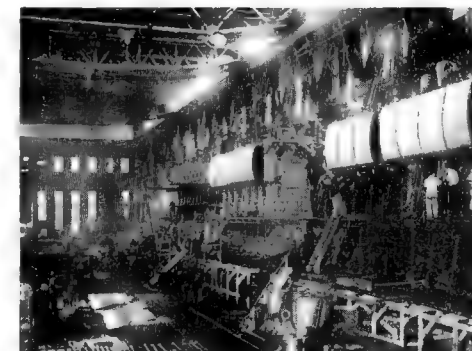
### WORKS

Nagasaki Works,  
Shimonoseki Works,  
Hiroshima Works,  
Hiroshima Precision  
Machine Works.

### NEW YORK OFFICE

c/o Equitable Building,  
120 Broadway, New York 5, N.Y.

Diesel Engine Erecting Shop  
—Nagasaki Works



Experimental Tank—Nagasaki





Her Majesty's Yacht  
**BRITANNIA**  
is equipped with

***DECCA Radar***

DECCA RADAR LIMITED  
LONDON • ENGLAND



# GENERAL INDEX (Named Ships only.)

AALHOLM (DA)—ARTFUL

Abbreviations in ( ) following the name of the ship indicate the country. No abbreviation denotes Great Britain

A	Argentina	Cey	Ceylon	Dom	Dominican	Fin	Finland	I	Italy	Is	Israel	Nor	Norway	Phil	Philippines	R.N.Z.N.	New	Sp	Spain	Ur	Uruguay
Bel	Belgium	Chil	Chile	EA	East Africa	G	Germany	Ice	Iceland	J	Japan	Pan	Panama	Port	Poland	R.P.N.	Zealand	Sw	Sweden	Ven	Venezuela
Br	Brazil	C	China	Ec	Ecuador	Gr	Greece	Ind	India	Kor	Korea	Para	Paraguay	R.A.N.	Portugal	Rus	Pakistan	Th	Thailand	Yu	Yugoslavia
Bul	Bulgaria	Col	Colombia	Eg	Egypt	Haiti	Honduras	Ir	Iraq	Mex	Mexico	Per	Peru	R.C.N.	Roumania	S.A.	Russia	T	Turkey	Zan	Zanzibar
Bur	Burma	Cu	Cuba	F	France	Hon	Hungary	Iri	Ireland	N	Netherlands			Ro			South Africa	U.S.	United States		

AAL—AEN	Page	AET—ALB	Page	ALB—ALM	Page	ALM—ANC	Page	ANC—AR	Page	ARA—ART	Page
<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>	
Aalholm (Da) ...	175	Aetos (Gr) ...	227	Alberto Restrepo (Col) ...	166	Almirante Simpson (Chil) ...	149	Ancre (F) ...	212	Arabe (F) ...	207
Aalsmeer (N) ...	263	Afonso de Albuquerque (Port) ...	293	Albion ...	12	Almirante Valdes (Sp) ...	339	Andagoya (Col) ...	166	Aragua (Ven) ...	461
Aarosund (Da) ...	175	Africaire (F) ...	210	Albrighton ...	48	Almirk Castle ...	50	Andenes (Nor) ...	274	Araguari (Br) ...	137
Aberford ...	63	Afroesta (Gr) ...	229	Alcala Galliano (Sp) ...	339	Aloe (U.S.) ...	451	Andis (Ind) ...	235	Araguaya (Br) ...	137
Abadia Mendez (Col) ...	166	Agave (I) ...	248	Alcaston ...	57	Alphee (F) ...	219	Andong (Kor) ...	255	Araignee (F) ...	218
Abatan (U.S.) ...	450	Agassiz (U.S.) ...	456	Alchemy (Rus) ...	321	Alsacien (F) ...	204	Andrea Doria (I) ...	241	Arapahoe (U.S.) ...	452
Abbeydale ...	79	Agent (Rus) ...	321	Alchiba (U.S.) ...	448	Alsea (U.S.) ...	452	Andrew ...	52	Ararat (R.A.N.) ...	89
Abbot (U.S.) ...	412	Agerholm (U.S.) ...	408	Alcide ...	52	Alsedo (Sp) ...	338	Andromeda (I) ...	245	Arataki (R.N.Z.N.) ...	112
Abcoude (N) ...	268	Aggressive (U.S.) ...	432	Alcona (U.S.) ...	448	Alshain (U.S.) ...	437	Andromeda (U.S.) ...	437	Araucano (Chil) ...	149
Abdon Calderon (Ec) ...	184	Agile (U.S.) ...	432	Alcor (U.S.) ...	422	Aissund (Da) ...	175	Andromede (F) ...	210	Arb (J) ...	254
Abercrombie ...	21	Agin-court ...	32	Alcone (U.S.) ...	448	Aistede (U.S.) ...	447	Androskogin (U.S.) ...	454	Arbalete (F) ...	218
Abercrombie (U.S.) ...	417	Agissante (F) ...	218	Alcyone (U.S.) ...	448	Alta (Nor) ...	276	Ane (Sw) ...	355	Arbutus (U.S.) ...	458
Abete (I) ...	248	Aguirre (P) ...	281	Alcea (Chil) ...	148	Altair (F) ...	213	Anemone (F) ...	214	Arcade (Rus) ...	321
Abikir (Eg) ...	186	Ahrens (U.S.) ...	418	Aldebaran (I) ...	213	Altair (I) ...	245	Anemone (I) ...	248	Arcadia (U.S.) ...	445
Abnaki (U.S.) ...	452	Ahven (Fin) ...	190	Aldebaran (U.S.) ...	447	Altair (SW) ...	352	Anemone (Phil) ...	286	Arch (Rus) ...	321
Abraham Crijnsen (N) ...	269	Aias (Gr) ...	230	Aldebaran (SW) ...	352	Altair (U.S.) ...	447	Angamos (Chil) ...	151	Archerfish (U.S.) ...	424
Abraham van der Hulst (N) ...	269	Aichi Maru (J) ...	254	Alder Lake (Rus) ...	322	Altair (Port) ...	296	Angang (Ind) ...	235	Arctic Tern (R.C.N.) ...	100
Absecon (U.S.) ...	454	Aiguade (F) ...	220	Alderney ...	52	Altam ...	58	Angara (Rus) ...	329	Arcila (Sp) ...	343
Abukuma (J) ...	253	Ailette (F) ...	212	Alencon (F) ...	212	Attama (U.S.) ...	387	Angkloeng (Ind) ...	235	Arcturus (Sw) ...	352
Acacia (F) ...	213	Air Chief (R.A.N.) ...	90	Alencon (Rus) ...	320	Alcioter (Rus) ...	320	Angler (U.S.) ...	427	Arcturus (F) ...	213
Acacia (I) ...	248	Air Master (R.A.N.) ...	90	Althea (U.S.) ...	458	Alert (Phil) ...	447	Angostura (Br) ...	138	Ardeal (Rus) ...	326
Acacia (U.S.) ...	457	Air Mercy (R.A.N.) ...	90	Alert (U.S.) ...	286	Aludra (U.S.) ...	235	Angra do Heroismo (Port) ...	296	Arden (F) ...	214
Acanthe (F) ...	213	Air Speed (R.A.N.) ...	90	Alexander J. Luke (U.S.) ...	420	Alulu (Ind) ...	235	Anibal Mendonca (Br) ...	140	Ardent (U.S.) ...	432
Accokeek (U.S.) ...	452	Air Trail (R.A.N.) ...	90	Alexander Nevsky (Rus) ...	305	Alvina C. Cockrell (U.S.) ...	417	Animoso (Rus) ...	314	Ardimento (Rus) ...	314
Accomac (U.S.) ...	451	Airsprite ...	80	Alferez Mackinlay (A) ...	128	Alvsborg (Sw) ...	352	Animoso (Rus) ...	314	Arenac (U.S.) ...	436
Acharné (F) ...	220	Aisne ...	32	Alfios (Gr) ...	230	Alvsnabben (Sw) ...	352	Annet ...	65	Arendal (Nor) ...	274
Achelous (Gr) ...	230	Aiacienne (F) ...	216	Alfonso Vargas (Col) ...	166	Alyosha Popovitch (Rus) ...	331	Anson ...	19	Arequipa (U.S.) ...	447
Achelous (U.S.) ...	446	Ajax (U.S.) ...	446	Alfred A. Cunningham (U.S.) ...	410	Alyse (F) ...	213	Antaios (Gr) ...	230	Arethuse (F) ...	210
Achernar (F) ...	213	Ajone (F) ...	213	Algerien (F) ...	207	Amahai (Ind) ...	235	Antalya (T) ...	366	Aretusa (I) ...	245
Achernar (U.S.) ...	437	Aionpaa (Fin) ...	190	Algol (U.S.) ...	437	Amakusa (J) ...	253	Antang (Ind) ...	235	Argentina (A) ...	124
Acheron ...	52	Ajuricaba (Br) ...	137	Algol (F) ...	213	Amarante (F) ...	214	Antares (F) ...	213	Argo (Gr) ...	230
Achomawi (U.S.) ...	452	Aka (Eg) ...	188	Algonaut ...	25	Amasra (T) ...	366	Antares (U.S.) ...	448	Argo (Sw) ...	352
Aconit (F) ...	213	Akane (J) ...	252	Algonquin (R.C.N.) ...	96	Amazonas (Br) ...	137	Antares (Sw) ...	352	Argo (U.S.) ...	456
Acre (Br) ...	137	Akar (T) ...	370	Algornab (U.S.) ...	448	Amazonas (P) ...	284	Anthedon (U.S.) ...	444	Argonaut (Gr) ...	228
Acree (U.S.) ...	421	Akin (T) ...	370	Alghema (U.S.) ...	452	Amberjack (U.S.) ...	423	Anthony (U.S.) ...	412	Argonaut (U.S.) ...	423
Acraeon ...	44	Akizuki (J) ...	254	Athema (U.S.) ...	448	Amberley Castle ...	50	Antic ...	81	Argonauta (F) ...	210
Actif (F) ...	220	Akpina (T) ...	370	Alhucemas (Sp) ...	343	Ambush ...	52	Antietam (U.S.) ...	381	Argun (Rus) ...	323
Active (U.S.) ...	456	Aktion (Gr) ...	229	Alikmon (Gr) ...	230	Ameland (N) ...	268	Antigonish (R.C.N.) ...	97	Arholma (Sw) ...	353
Acushnet (U.S.) ...	458	Aktivni (Rus) ...	326	Alidade (F) ...	216	America (P) ...	284	Antioquia (Col) ...	165	Ariadne ...	29
Acute ...	56	Akutan (U.S.) ...	445	Alkai (Ind) ...	235	Amerigo Vespucci (I) ...	250	Antiploia (Laskos) (Gr) ...	229	Ariadne (U.S.A.) ...	456
Adamant ...	70	Alabama (U.S.) ...	389	Allagash (U.S.) ...	235	Ambury (U.S.) ...	429	Antiploia (Laskos) (Gr) ...	229	Ariete (Sp) ...	338
Adams (U.S.) ...	415	Alabarda (I) ...	247	Allegany (U.S.) ...	452	Ambush ...	52	Antiploia (Laskos) (Gr) ...	229	Arikara (U.S.) ...	452
Adamsville (R.C.N.) ...	102	Alacrity ...	44	Allegiance ...	81	Ametist (Rus) ...	320	Antonio Diaz (Ven) ...	462	Arismendi (Ven) ...	462
Adang (Th) ...	361	Alamein ...	2	Allen M. Sumner (U.S.) ...	410	Amherst ...	80	Antonio João (Br) ...	140	Arish (Eg) ...	188
Adherent ...	81	Alano (I) ...	249	Alliance ...	52	Amick (U.S.) ...	421	Antonio Maceo (Cu) ...	168	Aristaeus (U.S.) ...	446
Adigo (I) ...	251	Alanya (T) ...	366	Alligator ...	80	Amiral Exelmans (F) ...	216	Antonio Mosto (I) ...	248	Ark Royal ...	10
Adirondack (U.S.) ...	435	Aiaric ...	52	Allington Castle ...	50	Amiral Killick (Haiti) ...	231	Anzac (R.A.N.) ...	86	Arko (Sw) ...	353
Admirable (Rus.) ...	321	Alarm (Ir) ...	235	Alloro (I) ...	248	Amiral Mouchez (F) ...	209	Anzio (U.S.) ...	72	Arkingham ...	58
Admiral Makarov (Rus) ...	307	Alarm (Rus) ...	321	Almaack (U.S.) ...	448	Amiral Murgescu (Ro) ...	298	Aoi (I) ...	252	Armada ...	33
Admiral Nachimov (Rus) ...	305	Alaska (U.S.) ...	393	Almanzora (Sp) ...	342	Ammen (U.S.) ...	412	Apache (U.S.) ...	452	Armada (Rus) ...	321
Admiral Ushakov (Rus) ...	305	Alaunia ...	69	Almirante Antequera (Sp) ...	339	Amorgos (Gr) ...	230	Apalachee (U.S.) ...	458	Armatolos (Gr) ...	228
Adolf Lüderitz (Rus) ...	329	Alert ...	47	Almirante Brion (Col) ...	165	Amphion ...	52	Armoise (F) ...	214	Armoise (F) ...	214
Adonis (U.S.) ...	446	Aleva (Sp) ...	338	Almirante Brown (A) ...	124	Amphion (U.S.) ...	446	Ape (I) ...	247	Arndale ...	79
Adopt (Rus) ...	321	Albacore ...	56	Almirante Cervera (Sp) ...	336	Amphitrite (U.S.) ...	446	Apex (Rus) ...	321	Arne (U.S.) ...	437
Adria (U.S.) ...	447	Albany (U.S.) ...	396	Almirante Frontin (Br) ...	139	Ampis (Ind) ...	235	Apo (Phil) ...	285	Arno (I) ...	251
Adrias (Gr) ...	227	Albatros (Br) ...	139	Almirante Grau (P) ...	281	Ampok (Ind) ...	235	Apollo ...	29	Arnold J. Isbell (U.S.) ...	403
Adrien de Gerlache (Bel) ...	132	Albatros (F) ...	205	Almirante Jorge Montt (Chil) ...	151	Amsterdam (N) ...	263	Apollo (U.S.) ...	444	Arokwe (Ind) ...	235
Advocate (Rus) ...	321	Albatros (Po) ...	289	Almirante Lacerda (Port) ...	295	Amsterdam (U.S.) ...	402	Apostolis (Gr) ...	228	Arquebuse (F) ...	218
Aegcon (Gr) ...	228	Albatros (Rus) ...	314	Almirante Latorre (Chil) ...	146	Amvralak (Gr) ...	229	Appalachian (Gr) ...	435	Arromanches (F) ...	197
Aegir (Da) ...	176	Albatros (U.S.) ...	433	Almirante Lobo (Sp) ...	344	Amycus (U.S.) ...	446	Appleton ...	57	Arroyo (F) ...	220
Aegir (Ice) ...	232	Albay (Phil) ...	286	Almirante Miranda (U.S.) ...	339	An Tung (C) ...	154	Applique (F) ...	220	Artemis ...	52
Aegir (U.S.) ...	444	Albermarle (U.S.) ...	434	Almirante Padilla (Col) ...	165	Anacostia (U.S.) ...	449	Apu (Fin) ...	191	Artemis (F) ...	210
Aeneas ...	52	Albert W. Grant (U.S.) ...	411	Almirante Saldanha (Br) ...	139	Anafi (Gr) ...	230	Aquarius (U.S.) ...	448	Artevelde (Bel) ...	133
		Alberto Gomez (Col) ...	166	Almirante Schultz (Port) ...	296	Anchorite ...	52	AR I (Ur) ...	460	Artful ...	



# supplies the Navies of the World

## ADMIRALTY TYPE 619 H.F./M.F. TRANSMITTER AND HIGH QUALITY COMMUNICATIONS RECEIVER type C.A.T.

Designed as a general purpose wireless set to a British Admiralty specification, Type 619 is surely the most versatile set in the world.

Receiver C.A.T. can receive A1, 2 or 3 signals over the whole band 30 mc/s-160 kc/s (10-1900 metres), and A1 signals down to 60 kc/s (5000 metres).

It is especially designed to suppress re-radiation with its consequent risk of interception and D.F. by enemy submarines in war.

Transmitter 619H can radiate A1, 2 or 3 emissions from 1.5 mc/s to 16 mc/s (200-19 metres) at a mean power of 40 watts.

Transmitter 619M can radiate A1 or 2 emissions from 330-550 kc/s (910-545 metres) at a mean power of 15 watts.

Type 619 can be matched into any aerial system. The transmitters are so designed that they cannot overload if the aerial is shot away or short circuited in war or by accident, and remain ready for instant service when an alternative aerial can be connected.

A specially designed vacuum relay provides listening through on a single aerial. Type 619 is robust and small. Mounted vertically it occupies the space of a tall man. In cramped wireless offices it may be mounted as four separate units.

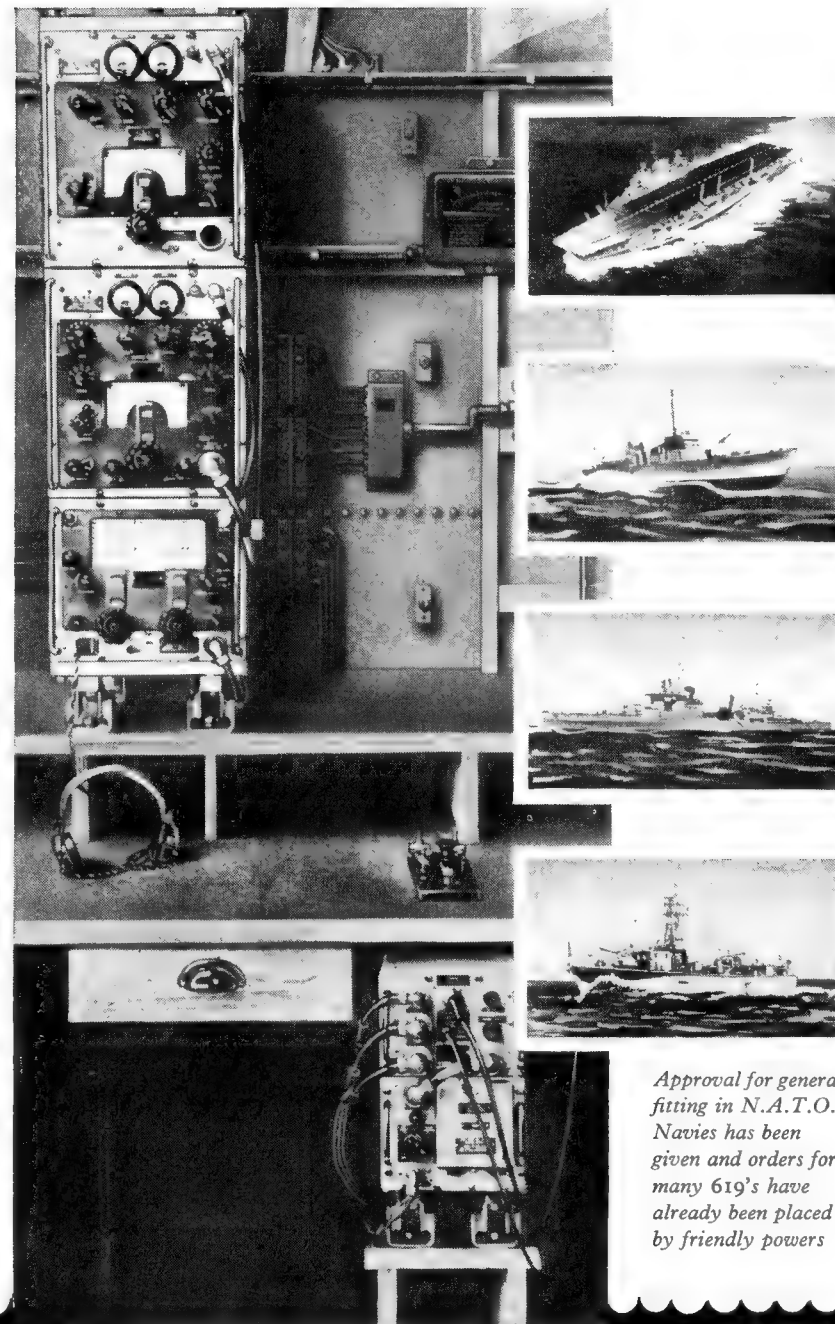
*It is being fitted over the whole range of British warships:—Aircraft Carriers and Cruisers, 4 sets; Destroyers, Frigates, Escort Vessels, Minelayers, 3 sets; Minesweepers, Motor Torpedo Boats, Motor Launches, Harbour Protection Craft, etc., 1 set.*

*Designed and manufactured for the Royal Navy by*

**REES MACE MARINE LTD**

ONE OF THE PYE GROUP OF COMPANIES

Overseas enquiries to PYE LIMITED CAMBRIDGE ENGLAND



*Approval for general fitting in N.A.T.O. Navies has been given and orders for many 619's have already been placed by friendly powers*



## GENERAL INDEX—continued.

## ARTHUR L. BRISTOL (U.S.)—BOUGAINVILLE (U.S.)

A—continued		AVE—BAN		BAQ—BAR		BAR—BEL		BEL—BLA		BLA—BOU	
ART—AVE	Page	Aventure (F)	Page	Baquadano	Page	Barrington	Page	Belvoir	Page	Blackwood	Page
Arthur L. Bristol (U.S.)	429	Averse (F)	220	Bara (J)	252	Barrosa	32	Ben Lomond	72	Blair (U.S.)	419
Arthur Middleton (U.S.)	436	Avery Island (U.S.)	447	Barataria (U.S.)	454	Barroso (Br)	136	Ben Nevis	72	Blairmore (R.C.N.)	99
Artibonite (Haiti)	231	Aviere (I)	244	Barau (Ind)	234	Barroso Pereira (Br)	139	Benalla (R.A.N.)	89	Blaison (F)	211
Artigas (Ur)	459	Avocat (U.S.)	433	Barbain	75	Barry (U.S.)	406	Benavente (Br)	137	Blake	21
Artigliere (I)	244	Avon Vale	49	Barbastel	75	Barsing	75	Bendalul (Ind)	234	Blankney	9
Artigliere (Rus)	311	Avoyel (U.S.)	452	Barbecue	75	Barsoud	75	Benewah (U.S.)	451	Blaricum (N)	268
Artillerist (Rus)	320	Avrova (Rus)	323	Barber (U.S.)	429	Barstoke (Bur)	142	Bengal (In)	107	Bias de Lezo (Col)	166
Arundel (U.S.)	458	Awaji (J)	253	Barbero (U.S.)	423	Barthorpe	75	Benham (U.S.)	411	Bias de Lezo (Sp)	338
Arunta (R.A.N.)	86	Axel (N)	268	Barberry (U.S.)	457	Bartbin (T)	369	Benizuru (J)	254	Bias Godinez (Mex)	258
Aryat (Ind)	235	Axford	63	Barbet (U.S.)	433	Bartizan	75	Benner (U.S.)	409	Blaxton	57
Asachidori (J)	254	Axios (Gr)	230	Barbette	75	Barcolomeu Dias (Port)	293	Bennett (U.S.)	412	Bleasdale	48
Ash (U.S.)	451	Ayame (J)	252	Barbican	75	Barton (U.S.)	410	Bennington (U.S.)	380	Blekoth (Ind)	234
Asheldham	58	Ayanami (J)	254	Barbour	75	Baruna (Ind)	235	Bennion (U.S.)	411	Blencathra	49
Ashland (U.S.)	438	Ayancik (T)	366	Barbourne	75	Barwind	75	Boo (Ind)	234	Blenny (U.S.)	424
Ashcabula (U.S.)	449	Ayvalik (T)	366	Azalea (F)	213	Barwon (R.A.N.)	88	Barbere (F)	207	Blessman (U.S.)	429
Askari (U.S.)	446	Azalea (I)	248	Barbrook	75	Basarabia (Rus)	326	Bergall (U.S.)	424	Bleuet (F)	213
Asko (Da)	176	Azevia (Port)	296	Barbrooke	75	Basaran (T)	368	Bergen (Nor)	273	Blibis (Ind)	234
Askofjord (Sw)	354	Azimut (Rus)	327	Barcastle	75	Basento (Rus)	330	Bering Strait (U.S.)	454	Block Island (U.S.)	384
Asphodele (F)	214	Azio (I)	250	Barcliff	75	Bashaw (U.S.)	427	Berkeley Castle	50	Bloemfontein (S.A.)	118
Asnaes (Da)	175	Azopardo (A)	126	Barclose	75	Basilic (F)	214	Berkut (Rus)	314	Blue (U.S.)	410
Aspirante Goicolea (Chil)	150			Barcock	75	Basilone (U.S.)	407	Berlaimont (F)	212	Blue Heron (R.C.N.)	100
Aspirante Horel (Chil)	150			Barcombe	75	Basque (F)	206	Bermuda	26	Blue Jacket (U.S.)	447
Aspirante Izaza (Chil)	150			Barcoo (R.A.N.)	83	Bassett (U.S.)	429	Berneval (F)	212	Blue Jay (U.S.)	433
Aspire (Rus)	321			Barcote	75	Bassingham	58	Berry Head	71	Blue Ranger	78
Aspro (U.S.)	424			Barcote	75	Basswood (U.S.)	457	Bertoga (Br)	137	Blue Ridge (U.S.)	435
Assail (Rus)	321	Baago (Da)	176	Barcroft	75	Bataa (R.A.N.)	86	Beskytteren (Da)	174	Bluebell (U.S.)	457
Assen (Bul)	141	Babitonga (Br)	137	Bardell	75	Bataan (U.S.)	384	Besugo (U.S.)	424	Bluebird (U.S.)	433
Assiduus	81	Babolsar (Per)	279	Bardolf	75	Batangas (Phil)	295	Betelgeuse (F)	213	Bluebonnet (U.S.)	458
Assiniboine (R.C.N.)	98	Babr (Per)	279	Barcev	65	Batfish (U.S.)	424	Betelgeuse (U.S.)	448	Bluefish (U.S.)	425
Aster (U.S.)	457	Babut (Ind)	233	Barfield	75	Batjan (N)	266	Better (Ind)	234	Bluegill (U.S.)	427
Astoria (U.S.)	402	Baccarat (F)	212	Barfleur	33	Battleaxe	31	Betulla (I)	248	Blunham	58
Astrea (Sw)	352	Bacchus	73	Barfoam	75	Battler	72	Beveland (N)	268	Blyskawica (Po)	288
Astrée (F)	210	Bach Dang (V.N.)	463	Barfoot	75	Bauru (Br)	137	Beverly W. Reid (U.S.)	429	Blyskawiczny (Po)	289
Astute	52	Bache (U.S.)	413	Barford	75	Baussell (U.S.)	408	Bevington	57	Bobolink (U.S.)	433
Astute (Rus)	321	Badacsony (Hun)	231	Barfoss	75	Baya (U.S.)	427	Bexar (U.S.)	436	Bocaina (Br)	137
Atahualpa (Ec)	184	Badoeng Strait (U.S.)	137	Barfount	75	Bayfield (U.S.)	436	Bezupreshni (Rus)	310	Bodenham	58
Atair (G.)	223	Baependi (Br)	452	Barflow	75	Bayonaise (F)	213	Bezuzgledny (Po)	289	Bodri (Rus)	310
Atak (T)	367	Bagaduce (U.S.)	437	Barhill	75	Beachampton	57	Bhayamkara (Ind)	235	Boeroe (N)	266
Atakapa (U.S.)	452	Baggensfjard (Sw)	354	Barholm	75	Beacon Hill (R.C.N.)	97	Biancospino (I)	248	Boga (Ind)	234
Atalanta (U.S.)	456	Bahawalpur (R.P.N.)	116	Barilla	75	Beale (U.S.)	413	Bibb (U.S.)	455	Bognaes (Da)	175
Athabaskan (R.C.N.)	95	Bahia Aguirre (A)	129	Bario (I)	246	Beamsville (R.C.N.)	102	Bicester	49	Bogus (U.S.)	387
Atherstone	49	Bahia Blanca (A)	128	Baritone	75	Beass (U.S.)	411	Bickington	57	Bohol (Phil)	285
Atherton (U.S.)	421	Bahia Buen Suceso (A)	129	Barking	75	Beatty (U.S.)	410	Bicuda (Port)	296	Boiki (Rus)	310
Atka (U.S.)	450	Bahia Theris (A)	129	Barkis	75	Beauteups-Beaupré (F)	209	Bidasoa (Sp)	342	Bois Belleau (F)	196
Atlanta (U.S.)	402	Bahiana (Br)	138	Barlake	75	Beaver (R.C.N.)	103	Bido (Ind)	234	Bojador (Phil)	285
Atlante (I)	251	Bailey (U.S.)	414	Barlane	75	Beech (U.S.)	137	Biduk (Ind)	234	Bold (U.S.)	432
Atlas (Gr)	230	Baionetta (I)	247	Barlecorn	75	Beecher (Br)	137	Biednota (Rus)	326	Bold Pathfinder	60
Atlas (U.S.)	446	Bairoko (U.S.)	385	Barlow	75	Backford	63	Bigbury Bay	42	Bold Pioneer	60
Atle (Sw)	355	Baise (F)	219	Barmill	75	Becuna (U.S.)	424	Bildeston	57	Bolster (U.S.)	452
Atleta (I)	251	Bak Du San (Kor)	255	Barmond	75	Bedum (N)	58	Bille (Da)	173	Bolsward (N)	268
Atrevida (Col)	166	Bakinski-Rabotchi (Rus)	320	Barmouth	75	Beech Lake (Rus)	268	Billfish (U.S.)	424	Bombard (Rus)	321
Atrevida (Sp)	341	Baku (Rus)	312	Barnaby	75	Beberbe (Br)	137	Biloxi (U.S.)	402	Bombarda (I)	247
Attacker	72	Balam (Ind)	234	Barnard	75	Bedford	458	Biokovo (Yu)	465	Bombay (In)	107
Attat (Ind)	235	Balao (U.S.)	424	Barnardale	75	Bedham	58	Bir Hakeim (F)	212	Bon Homme Richard (U.S.)	380
Attack (R.P.N.)	116	Bald Eagle (U.S.)	447	Barneath	75	Bedm	58	Birch (U.S.)	458	Bonaventure (R.C.N.)	93
Atule (U.S.)	424	Balduque de Silva (Port)	295	Barnegat (U.S.A.)	444	Beech (U.S.)	322	Birchol	78	Bond (Rus)	321
Auburn (U.S.)	435	Balder (N)	268	Begonia (I)	270	Beech Lake (Rus)	322	Birinci Inönü (T)	366	Bondy (P)	283
Aucilla (U.S.)	449	Balder (Nor)	274	Begonia (I)	270	Beemster (N)	268	Birkholm (Da)	175	Bondia (U.S.)	447
Audaz (Br)	140	Balder (Sw)	355	Begor (U.S.)	268	Beilen (N)	234	Birmingham	23	Bonham (U.S.)	456
Audaz (Sp)	338	Baldock (U.S.)	423	Bekaka (Ind)	234	Beilak (Ind)	234	Birmingham (U.S.)	402	Booth (U.S.)	421
Augury (Rus)	321	Baldwin (U.S.)	414	Belatik (U.S.)	234	Belatis (U.S.)	234	Bisham	58	Borculo (N)	268
Augusta (U.S.)	398	Ballinderry	46	Belet (U.S.)	27	Bisson (F)	208	Bishopdale	79	Bordelaix (F)	206
Auk (U.S.)	432	Balsam (U.S.)	457	Belfort (F)	212	Bissou (F)	208	Bordelon (U.S.)	409	Bordelon (U.S.)	409
Aulick (U.S.)	412	Balsamine (F)	214	Belfort (F)	212	Bittersweet (U.S.)	457	Boreham	58	Boreham	58
Aulne (F)	219	Baltimore (U.S.)	397	Belgol	79	Bivin (U.S.)	417	Borie (U.S.)	410	Borkum (G)	223
Ault (U.S.)	410	Baluchistan (R.P.N.)	115	Belier (U.S.)	220	Bizani (Gr)	229	Borkum (G)	223	Borndiep (N)	268
Aura (Fin)	190	Bambara (F)	207	Bell (U.S.)	412	Black (U.S.)	411	Borne (N)	268	Borne (N)	268
Auriga	52	Bamborough Castle	50	Bellacrix (U.S.)	437	Black Prince (R.N.Z.N.)	109	Borum (U.S.)	418	Boston (U.S.)	397
Aurochs	52	Banckert (N)	264	Belle Grove (U.S.)	438	Black Ranger	78	Botetourt (U.S.)	436	Botetourt (U.S.)	436
Aurora (U.S.)	456	Bancroft (U.S.)	414	Belle Isle (U.S.)	447	Blackburn	76	Bottineau (U.S.)	436	Bottineau (U.S.)	436
Ausonia (I)	251	Bang (U.S.)	424	Bellona (Da)	172	Blackfin (U.S.)	424	Bottisham	58	Bottisham	58
Autun (F)	212	Bangkeo (Th)	360	Beilona (R.N.Z.N.)	109	Blackford (U.S.)	451	Bouan (F)	211	Bouan (F)	211
Autaro (Chl)	149	Bango (Ind)	237	Belmonte (Br)	141	Blackhaw (U.S.)	457	Bouchard (A)	128	Bouchard (A)	128
Aveley	58	Bangrachan (Th)	360	Belmoretz (Bul)	354	Blackrock (U.S.)	458	Boudeuse (F)	208	Boudeuse (F)	208
Avenge (U.S.)	432	Banner (U.S.)	448	Belos (Sw)	354	Blackthorn (U.S.)	457	Bougainville (U.S.)	386	Bougainville (U.S.)	386
Aventinus (U.S.)	446	Bannock (U.S.)	452	Beltrami (U.S.)	448						
		Banteng (Ind)	233								

## BOULONNAIX (F)—CHOPPER

## GENERAL INDEX—continued

## B—continued

BOU—BRO	Page
Boulonnaix (F) ...	206
Boulston ...	57
Bourdonnaix (F) ...	203
Boutwell (U.S.) ...	456
Bouvet (F) ...	203
Bowen (R.A.N.) ...	89
Bowers (U.S.) ...	429
Bowfin (U.S.) ...	424
Bownet ...	75
Boxer ...	55
Boxer (U.S.) ...	381
Boxol ...	79
Boxtel (N) ...	268
Boxwood (U.S.) ...	451
Boyd (U.S.) ...	412
Boyle (U.S.) ...	414
Bracco (I) ...	249
Bracui (Br) ...	137
Bradford (U.S.) ...	412
Braine (U.S.) ...	412
Bramble ...	56
Bramble (U.S.) ...	457
Brambling (U.S.) ...	433
Brännaren (Sw) ...	354
Brant (U.S.) ...	433
Brantingham ...	58
Bratianul (Rus) ...	326
Bray (U.S.) ...	429
Brayford ...	63
Braztsovi (Rus) ...	309
Bream (U.S.) ...	427
Brearley ...	58
Brecon ...	48
Bredskär (Sw) ...	353
Bremerton (U.S.) ...	397
Bremson (Sw) ...	353
Brenchley ...	58
Brennero (I) ...	250
Breton ...	57
Breskens (B) ...	268
Brestois (F) ...	206
Breton (F) ...	206
Breton (U.S.) ...	387
Breukelen (N) ...	268
Briareus (U.S.) ...	446
Briceno Mendez (Ven) ...	462
Brielle (N) ...	268
Brier (U.S.) ...	457
Brigand ...	81
Brigham ...	58
Brilyant (Rus) ...	320
Brinkley ...	58
Brinkley Bass (U.S.) ...	408
Brinton ...	57
Brion (Ven) ...	462
Brissenden ...	48
Brister (U.S.) ...	419
Bristol (U.S.) ...	410
Britannia ...	73
Briton ...	81
Brix (F) ...	209
Broadbill (U.S.) ...	432
Broadley ...	58
Broadsword ...	31
Brock (U.S.) ...	429
Brocklesby ...	49
Brockville (R.C.N.) ...	99
Brolga (R.A.N.) ...	90
Bronx (U.S.) ...	436
Brookings (U.S.) ...	436
Broomdale ...	79
Broomley ...	58
Brough (U.S.) ...	419
Brouwershaven (N) ...	268
Brown (U.S.) ...	412
Brownington ...	57

## BRO—CAD

BRO—CAD	Page
Brown Ranger ...	78
Brownson (U.S.) ...	408
Bruine (F) ...	220
Bruinisse (N) ...	268
Bruizer ...	72
Brule (U.S.) ...	448
Brummen (N) ...	268
Brush (U.S.) ...	410
Bryansford ...	63
Bryant (U.S.) ...	411
Bryce Canyon (U.S.) ...	445
Bryher ...	65
Buchan Ness ...	71
Buck (U.S.) ...	410
Buckeye (U.S.) ...	451
Buckingham (R.C.N.) ...	97
Bucklesham ...	58
Buckley (U.S.) ...	420
Buckthorn (U.S.) ...	451
Bucovina (Rus) ...	326
Buenos Aires (A) ...	125
Buffle (F) ...	220
Buffoluto (I) ...	251
Bugara (U.S.) ...	424
Buhi (Da) ...	173
Bui (Rus) ...	322
Bulacan (Phil) ...	286
Bulawayo ...	76
Bulgia (N) ...	268
Bull (U.S.) ...	429
Bullard (U.S.) ...	411
Bullfinch ...	74
Bulwark ...	12
Bulwark (U.S.) ...	432
Bunbury (R.A.N.) ...	89
Bunch (U.S.) ...	429
Bundaberg (R.A.N.) ...	89
Bunker Hill (U.S.) ...	381
Bunting (U.S.) ...	433
Burak Reis (T) ...	365
Burdekin (R.A.N.) ...	88
Burdjamhal (Ind) ...	234
Burdo (U.S.) ...	429
Burghead Bay ...	42
Burgeton ...	75
Burke (U.S.) ...	429
Burley ...	58
Burnaston ...	57
Burns (U.S.) ...	412
Burrfish (U.S.) ...	427
Burton Island (U.S.) ...	450
Burun (Rus) ...	320
Burza (Po) ...	288
Bushnell (U.S.) ...	444
Bustler ...	81
Butternut (U.S.) ...	451
Buttington ...	57
Buttonwood (U.S.) ...	457
Bystry (Po) ...	289

## C

C	Page
Cabedelo (Br) ...	133
Cabezon (U.S.) ...	424
Cabildo (U.S.) ...	438
Cabimas (Col) ...	166
Cabo Blanco (P) ...	233
Cabo Bustos (Chil) ...	150
Cabo Fradera (Sp) ...	343
Caboclo (Br) ...	138
Cabot (U.S.) ...	384
Cabreres (Chil) ...	151
Cabrilla (U.S.) ...	424
Cacapon (U.S.) ...	449
Cache (U.S.) ...	449
Cactus (U.S.) ...	457
Cadiz ...	33

## CAD—CAP

CAD—CAP	Page
Cadmus (U.S.) ...	446
Caesar ...	34
Cagayan (Phil) ...	286
Cahaba (U.S.) ...	449
Cahokia (U.S.) ...	452
Cahoone (U.S.) ...	456
Cahuilla (U.S.) ...	452
Caiman (U.S.) ...	424
Caio Duilio (I) ...	241
Caistor Castle ...	50
Calcaterra (U.S.) ...	419
Caldas (Col) ...	165
Caldwell (U.S.) ...	414
Caldy ...	65
Caliente (U.S.) ...	449
California (Mex) ...	257
California (U.S.) ...	392
Callao (P) ...	233
Calliope (I) ...	245
Calocohatchee (U.S.) ...	449
Calton ...	57
Calumet (U.S.) ...	458
Calvert (U.S.) ...	436
Calvo Sotelo (Sp) ...	340
Calypso (U.S.) ...	456
Camaguey (Cu) ...	169
Camaro (U.S.) ...	448
Camberford ...	63
Cambria (U.S.) ...	436
Cambrian ...	34
Camelia (F) ...	213
Cameron (U.S.) ...	451
Camocim (Br) ...	138
Camp (U.S.) ...	419
Campanule (F) ...	214
Campbell (U.S.) ...	455
Campdown ...	33
Canak (T) ...	369
Canakkale (T) ...	366
Cananea (Br) ...	138
Canaries (Sp) ...	335
Canberra (U.S.) ...	397
Candarli (T) ...	366
Candid (Rus) ...	321
Caney (U.S.) ...	449
Canisteo (U.S.) ...	449
Canopo (I) ...	245
Canopus (Port) ...	296
Canovas del Castillo (Sp) ...	340
Cantho (F) ...	212
Cap de la Madeleine (R.C.N.) ...	97
Cap Ferrat (F) ...	220
Capable ...	81
Capable (Rus) ...	321
Capana (Ven) ...	462
Cape Breton (R.C.N.) ...	99
Cape Esperance (U.S.) ...	386
Cape Gloucester (U.S.) ...	384
Cape Scott (R.C.N.) ...	99
Caperton (U.S.) ...	411
Capitane (U.S.) ...	424
Capitan Bocanegra (Col) ...	165
Capitan Cabral (Para) ...	278
Capitan Julio Patino (Col) ...	166
Capitan Miranda (Ur) ...	459
Capitan O'Brien (Chil) ...	149
Capitan Prat (Chil) ...	147
Capitan Rigoberto Giraldo (Col) ...	166
Capitan Ruiz (Col) ...	166
Capitan Thompson (Chil) ...	149
Capitan Tono (Col) ...	165
Capitan Wenceslao Arvelo (Dom) ...	180
Capiz (Phil) ...	285
Capotillo (Dom) ...	182
Capps (U.S.) ...	412
Caprice ...	34
Capricieuse (F) ...	208
Capricorne (F) ...	213

## CAP—CEB

CAP—CEB	Page
Capricornus (U.S.) ...	437
Captain Arlo L. Olsen (U.S.) ...	448
Captivate (Rus) ...	321
Capucine (F) ...	214
Carabinier (F) ...	214
Carabiniere (I) ...	244
Caracas (Ven) ...	463
Caravan (Rus) ...	321
Caravela (Br) ...	138
Carbonero (U.S.) ...	426
Card (U.S.) ...	387
Cardak (T) ...	366
Cardigan Bay ...	42
Cardinal (U.S.) ...	433
Cardingham ...	58
Careful ...	81
Carhampton ...	57
Carib (U.S.) ...	452
Caribe (Cu) ...	168
Caribe (Ven) ...	463
Carioca (Br) ...	138
Carisbrooke Castle ...	50
Carlos Galindo (Col) ...	166
Carmick (U.S.) ...	415
Carnavon Bay ...	42
Carp (U.S.) ...	424
Carpellotti (U.S.) ...	429
Carpenter (U.S.) ...	406
Carroll (U.S.) ...	421
Carron ...	34
Carrondale (U.S.) ...	439
Cassanba (T) ...	366
Cartagena (Col) ...	166
Carter Hall (U.S.) ...	438
Cartigan (U.S.) ...	456
Carvalho Araujo (Port) ...	295
Carysfort ...	34
Casa Grande (U.S.) ...	438
Casabianca (F) ...	203
Casamance (F) ...	220
Cascade (F) ...	220
Cascade (U.S.) ...	445
Casco (U.S.) ...	454
Casma (Chil) ...	148
Cassandra ...	34
Cassar (F) ...	203
Cassin Young (U.S.) ...	411
Cassiopea (I) ...	246
Cassiopee (F) ...	213
Castagno (I) ...	248
Castilla (P) ...	281
Castle (U.S.) ...	402
Castlemaine (R.A.N.) ...	89
Castle Rock (U.S.) ...	454
Castor (F) ...	213
Castor (U.S.) ...	447
Catalpa (U.S.) ...	451
Catamarca (A) ...	126
Catamount (U.S.) ...	438
Cataracte (F) ...	220
Catawba (U.S.) ...	452
Catfish (U.S.) ...	424
Catocin (U.S.) ...	435
Catskill (U.S.) ...	438
Cattistock ...	49
Caution ...	57
Caution (Rus) ...	321
Cautious ...	81
Cauvery (In) ...	106
Cavalier ...	34
Cavalier (U.S.) ...	436
Cavalla (U.S.) ...	427
Cavallaro (U.S.) ...	429
Cavendish ...	34
Cavite (Phil) ...	286
Cawsand Bay ...	42
Cavuga (R.C.N.) ...	95
Cebu (Phil) ...	285

## CEB—CHE

CEB—CHE	Page
Cebu (U.S.) ...	446
Cecil J. Doyle (U.S.) ...	417
Cedar (U.S.) ...	458
Cedar Creek (U.S.) ...	449
Cedar Lake (Rus) ...	322
Cedarvale ...	78
Cedarwood (R.C.N.) ...	101
Cedro (I) ...	248
Celerol ...	79
Centauro ...	12
Centauro (Br) ...	140
Centauro (I) ...	245
Centauros (U.S.) ...	448
Centinela (Sp) ...	343
Cepet (F) ...	220
Cephus (U.S.) ...	448
Ceram (N) ...	266
Cerberus (N) ...	270
Cero (U.S.) ...	425
Cervantes (A) ...	126
Cesme (T) ...	366
Ceylon ...	23
Chaffinch (U.S.) ...	433
Chahsevar (Per) ...	279
Chaika (Rus) ...	314
Chailey ...	58
Chain (U.S.) ...	452
Chaleur (R.C.N.) ...	100
Challenge (U.S.) ...	452
Challenger ...	67
Chambers (U.S.) ...	419
Chameleon ...	56
Chamois (F) ...	208, 463
Champion (F) ...	220
Champion (U.S.) ...	432
Champlin (U.S.) ...	414
Chandaburi (Th) ...	358
Chandeleur (U.S.) ...	434
Chang (Th) ...	361
Chang An (C) ...	160
Chang Pei (C) ...	152
Chang Sha (C) ...	152
Chang Teh (C) ...	154
Change (U.S.) ...	432
Chanticleer (U.S.) ...	451
Chaoan (C) ...	160
Chaplet ...	34
Chara (U.S.) ...	437
Charente (F) ...	219
Charger ...	72
Charity ...	34
Charles Ausburn (U.S.) ...	413
Charles Carroll (U.S.) ...	436
Charles E. Brannon (U.S.) ...	417
Charles F. Hughes (U.S.) ...	414
Charles H. Roan (U.S.) ...	408
Charles J. Badger (U.S.) ...	411
Charles J. Kimmel (U.S.) ...	416
Charles Lawrence (U.S.) ...	429
Charles P. Cecil (U.S.) ...	409
Charles R. Ware (U.S.) ...	408
Charles S. Sperry (U.S.) ...	410
Charr (U.S.) ...	424
Charrett (U.S.) ...	412
Charrua (A) ...	130
Chaser ...	72
Chataqua (U.S.) ...	454
Chateaufort (F) ...	202
Chatain (U.S.) ...	419
Chattenden ...	80
Chatterer (U.S.) ...	433
Chaudierre (R.C.N.) ...	98
Chauncey (U.S.) ...	411
Chawasha (U.S.) ...	452
Chediston ...	57
Cheerful ...	56
Cheka (Rus) ...	322
Cheliff (F) ...	218

## CHE—CHO

CHE—CHO	Page
Chelmer ...	46
Chelsham ...	58
Chemung (U.S.) ...	449
Chen An (C) ...	159
Chenango (U.S.) ...	387
Chengwan (C) ...	160
Chepacet (U.S.) ...	449
Chequers ...	34
Chernomoretz (Bul) ...	141
Cherokee (U.S.) ...	458
Cherry (U.S.) ...	458
Chestatee (U.S.) ...	450
Chester (U.S.) ...	398
Chester T. O'Brien (U.S.) ...	417
Chestnut (U.S.) ...	451
Chevalier (U.S.) ...	409
Chevalier Paul (F) ...	203
Cheviot ...	34
Chevreuil (F) ...	208
Chevron ...	34
Chewaucan (U.S.) ...	450
Chewink (U.S.) ...	433
Chi An (C) ...	152
Chi Nan (C) ...	152
Chiang Feng (C) ...	153
Chiang Hsi (C) ...	153
Chialing (C) ...	161
Chiang I (C) ...	162
Chiang P'ing (C) ...	162
Chiang Yuan (C) ...	155
Chiang Yung (C) ...	162
Chiao Jen (C) ...	155
Chiao Shan (C) ...	162
Chiburi (I) ...	253
Chicago (U.S.) ...	397
Chicherin (Rus) ...	326
Chichester ...	41
Chickadee (U.S.) ...	432
Chickasaw (U.S.) ...	452
Chidori (I) ...	254
Chief (U.S.) ...	432
Chieh 29 (C) ...	162
Chieftain ...	34
Chien Tang (C) ...	161
Chignecto (R.C.N.) ...	100
Chikaskia (U.S.) ...	449
Chikubu (I) ...	253
Chikugo (I) ...	253
Chilcompton ...	57
Childers ...	34
Chilka (In) ...	108
Chillingham ...	58
Chilton (U.S.) ...	436
Chilula (U.S.) ...	452
Chimaera (U.S.) ...	446
Chimango (U.S.) ...	433
Chimariko (U.S.) ...	452
Chimbote (P) ...	283
Chimera (I) ...	247
Chimon (U.S.) ...	447
Chincoteague (U.S.) ...	454
Ching Kang Shah (C) ...	153
Ching Tien (C) ...	162
Chinook (U.S.) ...	458
Chios (Gr) ...	230
Chipana (Chil) ...	148
Chipola (U.S.) ...	449
Chippewa (U.S.) ...	452
Chiriguana (A) ...	130
Chittagong (R.P.N.) ...	115
Chiu Hua (C) ...	162
Chivo (U.S.) ...	424
Chiyonami (I) ...	254
Chloris (U.S.) ...	446
Chocaw (U.S.) ...	452
Chongho (Kor) ...	255
Chopper (U.S.) ...	424

## GENERAL INDEX—continued.

## CHOURRE (U.S.)—DRAGMA (GR)

## C—continued

## CHO—COF

Chourre (U.S.)	446
Chow Praya (Th)	359
Chowanoc (U.S.)	452
Chrysantheme (F)	213
Chu Chien (C)	162
Chu Kwan (C)	162
Chu Tien (C)	153
Chu Tung (C)	155
Chuang (Th)	361
Chuan Shih Shui (C)	153
Chukawan (U.S.)	449
Chukcha (Rus)	327
Chumporn (Th)	358
Chung Cheng (C)	163
Chung Chi (C)	163
Chung Chien (C)	163
Chung Chuan (C)	163
Chung Hai (C)	163
Chung Hsing (C)	163
Chung Hsun (C)	163
Chung-Ji (Kor)	255
Chung Jin (Kor)	255
Chung Lien (C)	163
Chung Mukpong (Kor)	255
Chung Ning (C)	153
Chung Sheng (C)	163
Chung Ting (C)	163
Chung Yung (C)	453
Chuong Dong (V.N.)	453
Chungu (Kor)	255
Churruca (Sp)	339
Cibao (Dom)	180
Ciclone (U)	251
Cies (Sr)	343
Cigno (I)	245
Cillegio (I)	243
Cimarron (U.S.)	449
Cimeterre (F)	214
Cinchona (U.S.)	451
Cirrus (N)	270
Ciscar (Sp)	339
Citrus (U.S.)	457
Ciudad de Pereira (Col)	166
Clamagore (U.S.)	424
Clamour (U.S.)	432
Clamp (U.S.)	422
Clarbeston	57
Clarence K. Bronson (U.S.)	411
Clas Fleming (Sw)	357
Claxton (U.S.)	412
Clearwater	80
Clematis (U.S.)	453
Clematis (F)	214
Clemenceau (F)	175
Cleopatra	25
Cleveland	49
Cleveland (U.S.)	47
Clifton (R.C.N.)	102
Climax (U.S.)	432
Clinton (U.S.)	435
Clio (I)	245
Cliona (Iri)	236
Clover (U.S.)	457
Clytie (U.S.)	444
Coasters Island (U.S.)	447
Coates (U.S.)	416
Cobbler (U.S.)	424
Cobham	53
Cobia (U.S.)	425
Cockade	34
Cockatoo (U.S.)	433
Cockatrice	56
Cockrill (U.S.)	419
Cocona (U.S.)	452
Cod (U.S.)	425
Cofer (U.S.)	429

## COF—COQ

## Page

Coffman (U.S.)	421
Coghlan (U.S.)	414
Cogswell (U.S.)	411
Cohocton (U.S.)	449
Cohoes (U.S.)	451
Colac (R.A.N.)	89
Colahan (U.S.)	411
Colbert (F)	200
Colfax (U.S.)	456
Colington (U.S.)	447
Coll	65
Colleton (U.S.)	451
Collett (U.S.)	410
Colocolo (Chil)	151
Colonel William J. O'Brien (U.S.)	448
Colonial (U.S.)	438
Colorado (U.S.)	391
Colosso (I)	251
Colville (R.C.N.)	102
Columbia (R.C.N.)	99
Columbia (U.S.)	422
Columbine (U.S.)	458
Columbus (U.S.)	397
Comandante Almeida Carvalho (Port)	274
Comandante Garcia D'Avila (Br)	143
Comet	34
Commandant Amyot D'Inville (F)	208
Commandant de Pimodan (F)	208
Commandant Delage (F)	208
Commandant Domine (F)	219
Commandant Duboc (F)	213
Commandant Robert Giraud (F)	209
Commencement Bay (U.S.)	385
Comox (R.C.N.)	103
Compel (U.S.)	432
Competent (U.S.)	432
Compton (U.S.)	410
Constock (U.S.)	438
Conus	34
Concise (U.S.)	432
Concord	34
Condamine (R.A.N.)	87
Condor (U.S.)	433
Cone (U.S.)	498
Coneuch (U.S.)	444
Confiance	81
Confiance (F)	206
Confident	81
Conflict (U.S.)	432
Conger (U.S.)	423
Conifer (U.S.)	457
Coniston	57
Conklin (U.S.)	417
Conner (U.S.)	412
Conquest (U.S.)	432
Conservator (U.S.)	452
Consolation (U.S.)	443
Consort	34
Constance	34
Constant (U.S.)	432
Constantia (Ro)	219
Constitution (Ven)	452
Contest	34
Control (U.S.)	432
Converse (U.S.)	412
Conway (U.S.)	413
Cony (U.S.)	413
Cook	66
Cook (U.S.)	423
Cook Inlet (U.S.)	454
Coolbaugh (U.S.)	418
Coolie (F)	220
Cooner (U.S.)	421
Coos Bay (U.S.)	454
Cootamundra (R.A.N.)	89
Copahee (U.S.)	387
Copahicot (F)	213

## COQ—CRO

## Page

Coquette	56
Coral Sea (U.S.)	379
Corbesier (U.S.)	417
Cordoba (A)	126
Cordova (R.C.N.)	100
Corduba (U.S.)	447
Core (U.S.)	387
Cormorano (I)	247
Cormorant (R.C.N.)	100
Cormorant (U.S.)	433
Coronel Bolognesi (P)	281
Coronel Martinez (Para)	278
Coronel Mora Angueyra (Col)	166
Coronis (U.S.)	446
Corporal (U.S.)	424
Corregidor (U.S.)	386
Corry (U.S.)	409
Corsair (U.S.)	423
Corson (U.S.)	444
Corunna	32
Corvina (Port)	296
Cosmos (U.S.)	457
Cossack	34
Cossatot (U.S.)	449
Cutabato (Phil)	236
Cotatino (F)	223
Cotinga (U.S.)	433
Cotopaxi (Ec)	184
Cotswold	49
Cotton (U.S.)	411
Coulac (U.S.)	451
Cougar (R.C.N.)	100
Coursol (U.S.)	432
Courier	55
Courier (U.S.)	457
Courlan (U.S.)	433
Courser (U.S.)	433
Coutelas (F)	214
Covadonga (Chil)	148
Cowanesque (U.S.)	449
Cowara	49
Cowell (U.S.)	412
Cowichan (R.C.N.)	100
Cowie (U.S.)	415
Cowpens (U.S.)	214
Cowra (R.A.N.)	89
Cowslip (U.S.)	457
Cradiev	53
Crag (U.S.)	432
Crane	44
Crasham	53
Crawford (U.S.)	456
Cread (U.S.)	429
Credlock (U.S.)	432
Cree (U.S.)	452
Creole	34
Creole (F)	210
Creon (U.S.)	446
Crescent (R.C.N.)	96
Crescent City (U.S.)	436
Crete (Gr)	228
Crevalle (U.S.)	424
Christon	57
Crisalide (I)	247
Crispin	34
Cristobal Colon (Dom)	178
Cristoforo Colombo (Rus)	323
Croaker (U.S.)	427
Croatian (U.S.)	387
Crockett (U.S.)	436
Croix de Lorraine (F)	276
Croix du Sud (F)	213
Cromwell (U.S.)	416
Cronin (U.S.)	418
Croome	49
Crosley (U.S.)	429
Cross (U.S.)	417
Crossbill (U.S.)	433

## CRO—DAR

## Page

Crossbow	31
Crow (U.S.)	433
Cruise (U.S.)	432
Crusader (R.C.N.)	96
Csöbanc (Hun)	231
Cuba (Cu)	168
Cubera (U.S.)	424
Culebra Island (U.S.)	446
Culgoa (R.A.N.)	87
Cumberland	29
Cumberian Sound (U.S.)	434
Cumulus (N)	270
Curlew (U.S.)	433
Current (U.S.)	452
Currier (U.S.)	418
Currituck (U.S.)	434
Curtiss (U.S.)	434
Cusabo (U.S.)	452
Cushing (U.S.)	411
Cusk (U.S.)	424
Custódio de Melo (Br)	139
Cutlass (U.S.)	423
Cutt hunk Island (U.S.)	447
Cuxton	57
Cuvahoga (U.S.)	456
Cyane (U.S.)	456
Cyclamen (F)	213
Cyclops (Gr)	230
Cygnat	44
Cyprus (R.C.M.P.)	172
Czajka (Po)	237
Czapla (Po)	239

## D

Dabchick	60
Dacca (R.P.N.)	115
Daedalus (U.S.)	446
Dagong (Ind)	734
Dague (F)	214
Dahlia (F)	214
Dahlia (U.S.)	453
Daik (Ind)	234
Daino (I)	247
Da'o (J)	253
Daint	31
Daito (J)	253
Date W. Peterson (U.S.)	419
Dalgic (T)	370
Dalia (I)	249
Dalmazia (I)	253
Dalrymple	66
Dalswinton	57
Daiton Victory (U.S.)	449
Daly (U.S.)	412
Damara (Ind)	234
Damato (U.S.)	477
Damersham	53
Damon M. Cummings (U.S.)	419
Dampier	65
Damsay	65
Danai le (I)	247
Dane (U.S.)	436
Daniel (U.S.)	419
Daniel A. Jor (U.S.)	416
Daniel T. Griffin (U.S.)	429
Dannebrog (Da)	176
Dão (Port)	292
Ca'hne (U.S.)	456
Dar Pomoza (Po)	289
Darby (U.S.)	418
Darfour (Ég)	183
Daring	30
Dark Adventurer	61
Dark Antagonist	61
Dark Attacker	61
Dark Avenger	61

## DAR—DEU

## Page

Dark Bowman	61
Dark Cavalier	61
Dark Chaser	61
Dark Chieftan	61
Dark Defender	61
Dark Explorer	61
Dark Fighter	61
Dark Gladiator	61
Dark Hero	61
Dark Horseman	61
Dark Hunter	61
Dark Intruder	61
Dark Invader	61
Darleston	57
Darsham	58
Dart	46
Dash (U.S.)	432
Dashiell (U.S.)	411
Data (Ind)	234
Dauphin (F)	210
Davao (Phil)	286
Davenham	58
David C. Shanks (U.S.)	442
David Porter (Mex)	258
David W. Taylor (U.S.)	412
Davidov (Rus)	332
Davison (U.S.)	415
Davilia (Gr)	229
Day (U.S.)	416
Da ton (U.S.)	402
De Bitter (N)	265
De Brouwer (Bel)	132
D'Eestrees (F)	203
De Grasse (F)	200
De Haven (U.S.)	410
De Long (U.S.)	416
De Moor (Bel)	132
De Ruyter (N)	261
De Zeeuw (N)	265
De Zeven Provinciën (N)	261
Deal (U.S.)	448
Dealey (U.S.)	416
Écouverte (F)	206
Decoy	30
Deepwater	80
Defence	21
Defender	30
Defense (U.S.)	432
Deimas (U.S.)	448
Delfin (Po)	239
Delfin (Da)	173
Delfinul (Ro)	298
Delhi (In)	104
Delight	30
Deliver (U.S.)	452
Deloraine (R.A.N.)	89
Delphin (Gr)	223
Delta (U.S.)	446
Deluge (F)	220
Demeter (U.S.)	446
Demirhisar (T)	365
Deneb (Port)	296
Denebola (U.S.)	447
Dennis (U.S.)	417
Dennis J. Buckley (U.S.)	409
Density (U.S.)	432
Dentada (U.S.)	424
Denver (U.S.)	402
Derg	46
Derriton	57
Derwentdale	78
Derzki (Bul)	141
Des Moines (U.S.)	395
Descubierta (Sp)	341
Desford	63
Desna (Rus)	329
Detector (U.S.)	432
Deuel (U.S.)	436

## DEU—DRA

## Page

Deurloo (N)	268
Devastator (U.S.)	432
Device (U.S.)	432
Devilfish (U.S.)	424
Dewarutji (Ind)	234
Dewdale	78
Dexter (U.S.)	454
Dextrous (U.S.)	432
Diablo (U.S.)	423
Diachenko (U.S.)	429
Diadem	24
Diaguita (A)	130
Diamantina (R.A.N.)	88
Diamond	30
Diamond Head (U.S.)	445
Diana	30
Diana (Da)	172
Diana (Sp)	341
Dido	25
Dieppe	72
Dieppoise (F)	213
Digby (R.C.N.)	99
Diligence (U.S.)	456
Dingledale	78
Dingley	58
Diodon (U.S.)	424
Diogo Gomes (Port)	292
Diomedes (U.S.)	446
Dione (U.S.)	456
Dionysus (U.S.)	446
Diphda (U.S.)	437
Diploma (U.S.)	432
Dipper	80
Dipper (U.S.)	432
Direct (U.S.)	432
Disdain (Rus)	321
Dispenser	74
Distomon (Gr)	230
Disraton (Gr)	229
Dittisham	58
Diu (Port)	295
Diver	80
Dixie (U.S.)	445
Dixmude (F)	197
Djampea (Ind)	235
Dobrinja Nikitich (Rus)	332
Dodman Point	71
Dogfish (U.S.)	424
Dogwood (U.S.)	458
Dokkum (N)	268
Domiat (Ég)	186
Dominant (U.S.)	432
Danpaire (F)	212
Don O. Woods (U.S.)	429
Donald W. Wolf (U.S.)	429
Donativo (Cu)	169
Donner (U.S.)	438
Doran (U.S.)	415
Dorchester (U.S.)	451
Dortch (U.S.)	411
Dosorni (Rus)	325
Douglas A. Munro (U.S.)	417
Douglas H. Fox (U.S.)	410
Douglas L. Howard (U.S.)	419
Dour (U.S.)	432
Dourada (Port)	296
Douro (Port)	292
Douwe Aukes (N)	269
Downham	58
Doxa (Gr)	226
Doxaton (Gr)	229
Doyle (U.S.)	415
Doyle C. Barnes (U.S.)	417
Drachten (N)	268
Dragon (F)	214
Dragonet	75
Dragonet (U.S.)	424
Dragma (Gr)	229



**GENERAL INDEX—continued.**xiii

## GENERAL INDEX—continued

## GABBARD—HEMLOCK (U.S.)

GAB—GEM	Page	GEN—GIF	Page	GIE—GRA	Page	GRA—GUE	Page	GUE—HAN	Page	HAN—HEM	Page
<b>G</b>											
Gabbard ...	33	Gendreau (U.S.)...	418	Gieten (N) ...	268	Grampus (U.S.) ...	423	Guest (U.S.) ...	412	Hano (Sw) ...	353
Gabbiana (I) ...	247	General A. E. Anderson (U.S.) ...	441	Giethoorn (N) ...	268	Granat (Sw) ...	354	Guichen (F) ...	202	Han-Yang (C) ...	160
Gabilan (U.S.) ...	425	General Alexander M. Patch (U.S.) ...	442	Gilbert Islands (U.S.) ...	385	Granatiere (I) ...	244	Guide (U.S.) ...	432	Haportzim (Is) ...	238
Gadjah Mada (Ind) ...	233	General A. W. Brewster (U.S.) ...	442	Gillespie (U.S.) ...	414	Granby (R.C.N.) ...	99	Guldborgsund (Da) ...	175	Hanson (U.S.) ...	409
Gadwell (U.S.) ...	432	General A. W. Greely (U.S.) ...	442	Gillette (U.S.) ...	418	Grand Canyon (U.S.) ...	445	Gull (U.S.) ...	433	Haraden (U.S.) ...	412
Gafel (Rus) ...	322	General C. C. Ballou (U.S.) ...	442	Gilligan (U.S.) ...	417	Grandiere (F) ...	205	Gunason (U.S.) ...	418	Harder (U.S.) ...	423
Gage (U.S.) ...	436	General C. G. Morton (U.S.) ...	442	Girafe (F) ...	218	Gravelines ...	128	Gunnell (U.S.) ...	425	Hardhead (U.S.) ...	424
Gaggia (I) ...	248	General C. H. Muir (U.S.) ...	442	Girdle Ness ...	71	Grapple (U.S.) ...	452	Gunston Hall (U.S.) ...	438	Hardy ...	41
Gagliardo (I) ...	251	General D. E. Altman (U.S.) ...	442	Giresun (T) ...	364	Grasp (U.S.) ...	452	Gür (T) ...	366	Hare ...	56
Gainard (U.S.) ...	410	General Daniel I. Sultan (U.S.) ...	442	Giroflee (F) ...	213	Grauna (Br) ...	138	Gurke (U.S.) ...	408	Harkness (U.S.) ...	433
Gak (Rus) ...	322	General Edwin D. Patrick (U.S.) ...	442	Giuseppe Abba (I) ...	248	Gravelines ...	33	Gurnard (U.S.) ...	425	Harlan R. Dickson (U.S.) ...	410
Galatea ...	344	General E. T. Collins (U.S.) ...	442	Giuseppe Garibaldi (I) ...	242	Gravina (Sp) ...	339	Gurupi (Br) ...	138	Harle (G) ...	223
Galathea (Da) ...	174	General Edwin D. Patrick (U.S.) ...	442	Glacier (U.S.) ...	450	Grayback (U.S.) ...	422	Gustaf V (Sw) ...	348	Harlequin (U.S.) ...	432
Galeb (Yu) ...	466	General G. M. Randall (U.S.) ...	441	Gladan (Sw) ...	355	Graylag (U.S.) ...	432	Gustaf af Klint (Sw) ...	355	Harmon (U.S.) ...	418
Galicia (Sp) ...	336	General Greene (U.S.) ...	456	Gladiol (I) ...	248	Grayson (U.S.) ...	414	Gustave Zédé (F) ...	215	Harold J. Ellison (U.S.) ...	408
Galilea (U.S.) ...	443	General H. B. Freeman (U.S.) ...	442	Gladiolo (I) ...	248	Great Sitkin (U.S.) ...	445	Gwin (U.S.) ...	415	Harpham ...	58
Gallant (U.S.) ...	452	General H. F. Hodges (U.S.) ...	442	Gladstone (R.A.N.) ...	89	Greatford ...	63	Gyatt (U.S.) ...	403	Harpun (Sw) ...	354
Gals (Rus) ...	327	General Hugh J. Gaffey (U.S.) ...	442	Glaieu (F) ...	213	Green (U.S.) ...	244	Gyler (Nor) ...	274	Harrier (U.S.) ...	432
Galvarino (Chil) ...	151	General Harry Taylor (U.S.) ...	442	Glaive (F) ...	214	Greenfish (U.S.) ...	424	Gympie (R.A.N.) ...	89	Harrison (U.S.) ...	412
Galveston (U.S.) ...	402	General H. W. Butner (U.S.) ...	441	Glasgow ...	28	Greenhalgh (Br) ...	137	Gypsy (U.S.) ...	452	Harry E. Hubbard (U.S.) ...	410
Galvez (P) ...	282	General John Pope (U.S.) ...	441	Glassford ...	63	Greenlet (U.S.) ...	451			Harry F. Bauer (U.S.) ...	415
Gambia ...	26	General J. C. Breckinridge (U.S.) ...	441	Gleaves (U.S.) ...	414	Greenling (U.S.) ...	425			Harry L. Corl (U.S.) ...	429
Gamston ...	57	General J. H. McRae (U.S.) ...	442	Glenbrook (R.C.N.) ...	102	Greenville Victory (U.S.) ...	448	<b>H</b>		Hart ...	412
Gananque (R.C.N.) ...	99	General Leroy Eltinge (U.S.) ...	442	Glendon (R.C.N.) ...	102	Greenwood (R.C.N.) ...	101	Haas (U.S.) ...	417	Hartland Point ...	71
Ganga (In) ...	105	General M. C. Meigs (U.S.) ...	441	Glendyne (R.C.N.) ...	102	Greenwood (U.S.) ...	418	Habana (Cu) ...	169	Harutsuki (Rus) ...	309
Gansevoort (U.S.) ...	414	General M. H. Stewart (U.S.) ...	442	Glenelg (R.A.N.) ...	89	Greenthorn (U.S.) ...	58	Hachijo (I) ...	253	Haruzuki (I) ...	234
Gantner (U.S.) ...	429	General McHardy (Iri) ...	236	Glenevis (R.C.N.) ...	102	Gregory (U.S.) ...	411	Hackelback (U.S.) ...	424	Harverson (U.S.) ...	420
Gapeau (F) ...	220	General M. L. Hersey (U.S.) ...	442	Glenlivet II (R.C.N.) ...	102	Gremiaschi (Rus) ...	310	Haddo (U.S.) ...	425	Harwood (U.S.) ...	406
Gar (U.S.) ...	428	General Mason M. Patrick (U.S.) ...	442	Glenon (U.S.) ...	408	Grenadier (F) ...	241	Haddock (U.S.) ...	425	Hastings (Gr) ...	227
Garay (A) ...	126	General Maurice Rose (U.S.) ...	442	Glenside (R.C.N.) ...	102	Grenadier (U.S.) ...	423	Hadleigh Castle ...	50	Hathi (In) ...	108
Gardenia (F) ...	213	General Mola (Sp) ...	341	Glen (Da) ...	175	Grenville ...	40	Hafuglen (Da) ...	175	Hato (I) ...	254
Gardenia (I) ...	248	General Nelson M. Walker (U.S.) ...	442	Glenham ...	58	Gresham (U.S.) ...	454	Hafuglen (Da) ...	175	Hatsukari (I) ...	254
Gardiners' Bay (U.S.) ...	444	General R. E. Callan (U.S.) ...	442	Gloire (F) ...	201	Grey Goose ...	63	Haganah (Is) ...	237	Hatsunaki (I) ...	254
Garigliano (F) ...	212	General R. M. Blatchford (U.S.) ...	442	Glomma (Nor) ...	275	Gribben (Da) ...	175	Hagi (I) ...	252	Hatsuzaki (I) ...	313
Garland (U.S.) ...	432	General Sanjurjo (Sp) ...	341	Glory ...	17	Griffin (U.S.) ...	444	Hai (Nor) ...	276	Hatsuzakura (Rus) ...	275
Garonne (F) ...	219	General Simon B. Buckner (U.S.) ...	442	Glycine (F) ...	213	Gripskerk (N) ...	268	Haida (R.C.N.) ...	90	Haugesund (Nor) ...	276
Garpun (Rus) ...	322	General S. D. Sturgis (U.S.) ...	442	Glynn (U.S.) ...	436	Grise (R.C.N.) ...	102	Hailey (U.S.) ...	412	Hauk (Nor) ...	276
Garth ...	49	General Stuart Heinzelman (U.S.) ...	442	Gnevoi (Rus) ...	309	Grobelet (F) ...	102	Haines (U.S.) ...	429	Haven (U.S.) ...	443
Gascoyne (R.A.N.) ...	88	General W. A. Mann (U.S.) ...	441	Gobelet (F) ...	220	Godavari (In) ...	105	Haiti Victory (U.S.) ...	448	Haverfield (U.S.) ...	420
Gaspe (R.C.N.) ...	100	General W. C. Hann (U.S.) ...	442	Godavari (In) ...	105	Godavari (In) ...	105	Hajen (Da) ...	175	Haversham ...	58
Gastrickland (Sw) ...	349	General W. C. Langfitt (U.S.) ...	442	Goderich (R.C.N.) ...	99	Goderich (R.C.N.) ...	99	Hajen (Sw) ...	175	Havkatten (Da) ...	175
Gateshead ...	65	General W. C. Langfitt (U.S.) ...	442	Goeree (N) ...	269	Goes (N) ...	268	Hakata-Maru (I) ...	254	Havornen (Da) ...	175
Gatineau (R.C.N.) ...	80	General W. F. Hase (U.S.) ...	442	Goes (N) ...	268	Gölcük (T) ...	370	Hake (U.S.) ...	425	Hawaii (U.S.) ...	393
Gatling ...	98	General W. H. Gordon (U.S.) ...	441	Gold Ranger ...	78	Grönskar (Sw) ...	353	Halcon (Mex) ...	258	Hawea (R.N.Z.N.) ...	110
Gatling (U.S.) ...	411	General W. M. Black (U.S.) ...	442	Goldcrest (U.S.) ...	433	Gronseft (Rus) ...	330	Hale (U.S.) ...	412	Hawk (U.S.) ...	433
Gato (U.S.) ...	425	General William Mitchell (U.S.) ...	441	Golden Eagle (U.S.) ...	447	Grossbeak (U.S.) ...	433	Half Moon (U.S.) ...	454	Hawkesbury (R.A.N.) ...	88
Gaula (Nor) ...	276	General William O. Darby (U.S.) ...	442	Golden Fleece ...	56	Grouper (U.S.) ...	427	Halfbeak (U.S.) ...	424	Hawkins (U.S.) ...	409
Gauss (G) ...	223	General William Weigel (U.S.) ...	441	Goldenrod (U.S.) ...	458	Grouse (U.S.) ...	433	Halford (U.S.) ...	412	Hawthorn (U.S.) ...	458
Gavinton ...	57	Generalissimo (Dom) ...	178	Goldfinch (U.S.) ...	433	Growler ...	81	Halki (Gr) ...	229	Hayabusa (I) ...	254
Gävle (Sw) 349 ...	349	Genese (U.S.) ...	450	Gole (F) ...	218	Groza (Rus) ...	320	Hall (U.S.) ...	412	Hayasaka (Rus) ...	330
Gay Archer ...	60	Genet (F) ...	214	Gomati (In) ...	105	Grozni (Rus) ...	310	Halland (Sw) ...	412	Haydon ...	48
Gay B. mardier ...	60	Genkai (I) ...	253	Goncalo Velho (Port) ...	294	Grozny (Rus) ...	310	Hailebarde (F) ...	218	Haysworth (U.S.) ...	410
Gay Bowman ...	60	Gentian (U.S.) ...	457	Goncalves Zarco (Port) ...	294	Gru (I) ...	247	Haisey Powell (U.S.) ...	411	Haysville (R.C.N.) ...	102
Gay Bruiser ...	60	Gentiane (F) ...	214	Good Hope (S.A.) ...	118	Grumete Bolados (Chil) ...	150	Halsingborg (Sw) ...	349	Hayter (U.S.) ...	429
Gay Carbineer ...	60	Gentry (U.S.) ...	417	Goodrich (U.S.) ...	409	Grumete Tellez (Chil) ...	150	Haisham ...	349	Hazard (U.S.) ...	432
Gay Cavalier ...	60	George (U.S.) ...	418	Goodrich (U.S.) ...	409	Gruz (Rus) ...	322	Halsingland (Sw) ...	349	Hazel (U.S.) ...	451
Gay Centurion ...	60	George A. Johnson (U.S.) ...	416	Goodrich (U.S.) ...	409	Guadalcanal (U.S.) ...	386	Hamachidori (I) ...	252	Hazlewood (U.S.) ...	412
Gay Charger ...	60	George Clymer (U.S.) ...	436	Golden Eagle (U.S.) ...	447	Guadalorce (Sp.) ...	342	Hamagiku (I) ...	49	Hazleton ...	57
Gay Charioteer ...	60	George E. Davis (U.S.) ...	417	Goldenrod (U.S.) ...	458	Guadalupe (U.S.) ...	449	Hambleton ...	419	Healy (U.S.) ...	411
Gay Dragon ...	60	George K. Mackenzie (U.S.) ...	408	Goldfinch (U.S.) ...	433	Gualdalupe (U.S.) ...	449	Hambleton (U.S.) ...	434	Heather (U.S.) ...	457
Gay Fencer ...	60	Georges Lecointe (Bel) ...	132	Goss (U.S.) ...	417	Gualdalupe (U.S.) ...	449	Hamlin (U.S.) ...	419	Heatherton (R.C.N.) ...	102
Gay Forester ...	60	George W. Goethals (U.S.) ...	442	Gossamer ...	68	Gualdalupe (U.S.) ...	449	Hamman (U.S.) ...	419	Hector (U.S.) ...	446
Gayety (U.S.) ...	432	George W. Ingram (U.S.) ...	429	Gosselin (U.S.) ...	429	Gualdalupe (U.S.) ...	449	Hammer (Da) ...	416	Heddingham Castle ...	50
Gayret (T) ...	365	Georgi Seydov (Rus) ...	332	Gota Lejon (Sw) ...	347	Gualdalupe (U.S.) ...	449	Hammerberg (U.S.) ...	408	Heed (U.S.) ...	432
Gazzella (I) ...	247	Georges Leygues (F) ...	201	Goteborg (Sw) ...	349	Guanabara (Br) ...	257	Ham Tu (V.N.) ...	463	Heerman (U.S.) ...	412
Gazelle (F) ...	208	Gerranio (I) ...	248	Gotland (Sw) ...	349	Guanajuato (Mex) ...	257	Hamul (U.S.) ...	445	Heffring (N) ...	268
Gaziantep (T) ...	364	Geranium (F) ...	214	Goumier (F) ...	214	Guaporé (Br) ...	138	Hamza (Eg) ...	188	Hejmdal (Da) ...	174
Gearing (U.S.) ...	408	Gerardo Jansen (Dom) ...	178	Graadyb (Da) ...	175	Guarani (A) ...	130	Han Yang (Kor) ...	255	Hejren (Da) ...	175
Geiger (U.S.) ...	441	Geronimo (U.S.) ...	452	Gracieuse (F) ...	208	Guarani (Br) ...	140	Hanaduki (I) ...	254	Hekura (I) ...	253
Gelderland (N) ...	263	Ghazi (R.P.N.) ...	116	Grackle (U.S.) ...	433	Guardfish (U.S.) ...	425	Hanap (F) ...	219	Helena (U.S.) ...	397
Gelibolu (T) ...	364	Gherardi (U.S.) ...	415	Grady (U.S.) ...	417	Guardamarine Contreras (Chil) ...	150	Hancock (U.S.) ...	380	Helford ...	46
Gelso (I) ...	248	Gracinto Carini (I) ...	248	Graemsay ...	65	Guardian ...	55	Hang Po (C) ...	153	Helgenas (Da) ...	175
Gelsominol (I) ...	248	Giada (I) ...	246	Graesholm (Da) ...	175	Guavina (U.S.) ...	428	Hang Tuah (Ind) ...	233	Helios (U.S.) ...	446
Gemlik (T) ...	364	Giagliolo (I) ...	248	Graffias (U.S.) ...	41	Guayas (Ec) ...	183	Hank (U.S.) ...	410	Heliotrope (F) ...	214
Gemmert (N) ...	268	Giboulee (F) ...	219	Grafton ...	41	Guayon (Hon) ...	231	Hanlan (Kor) ...	255	Helmssdale ...	46
		Gidrogaf (Rus) ...	327	Grainger (U.S.) ...	448	Gudgeon (U.S.) ...	423	Hanna (U.S.) ...	417	Hemlock (U.S.) ...	457
		Gifford ...	63	Graju (Br) ...	138	Guepratte (F) ...	203				

## HEMMINGER (U.S.)—KASASAGI (J)

## GENERAL INDEX—continued.

H—continued	Page	HOC—HUN	Page	HUN—ING	Page	NG—JAG	Page	JAL—JUA	Page	JUA—KAS	Page
HEM—HOB		Hoche (F) ...	204	Huntingdon (U.S.) ...	401	Ingraham (U.S.) ...	410	Jallao (U.S.) ...	424	Juan Pablo Duarte (Dom) ...	178
Hemminger (U.S.) ...	421	Hodges (U.S.) ...	416	Huron (R.C.N.) ...	95	Inlay (Bur) ...	143	Jamaica ...	26	Juan Sebastian de Elcano (Sp) ...	344
Henderson (U.S.) ...	408	Hodgeston ...	57	Hurst (U.S.) ...	419	Inma (Bur) ...	143	Jamary (Col) ...	166	Jubilant (U.S.) ...	432
Hendrik Karsen (N) ...	270	Hoe (U.S.) ...	425	Huse (U.S.) ...	419	Instill (U.S.) ...	432	James Bay (R.C.N.) ...	100	Jui An (C) ...	160
Hengist ...	81	Hogen (Da) ...	175	Hussard (F) ...	214	Intisar (Eg) ...	188	James C. Owens (U.S.) ...	410	Jujuy (A) ...	126
Hengyang (C) ...	158	Hogezand (N) ...	263	Hval (Nor) ...	276	Intractable (F) ...	220	James E. Craig (U.S.) ...	418	Jules Verne (F) ...	215
Henley (U.S.) ...	410	Hoggatt Bay (U.S.) ...	386	Hvass (Nor) ...	276	Intrepid (U.S.) ...	380	James E. Kyes (U.S.) ...	408	Julius A. Raven (U.S.) ...	429
Hennepin (U.S.) ...	448	Hogue ...	33	Hwangpu (C) ...	161	Intrepide (F) ...	214	James O'Hara (U.S.) ...	442	Junna (In) ...	106
Henrico (U.S.) ...	436	Hoist (U.S.) ...	452	Hyades (U.S.) ...	447	Intrepide (Sp) ...	338	James M. Gillis (U.S.) ...	433	Juneau (U.S.) ...	404
Henrique Dias (Br) ...	138	Holder (U.S.) ...	407	Hyatt (Chil) ...	148	Inva (U.S.) ...	432	Jan van Brakel (N) ...	266	Juneau (R.A.N.) ...	89
Henry A. Wiley (U.S.) ...	415	Holderness ...	49	Hydrograaf (N) ...	269	Inverell (R.N.Z.N.) ...	432	Jan van Gelder (N) ...	269	Juniper (U.S.) ...	457
Henry Gibbons (U.S.) ...	442	Holger Danske (Da) ...	172	Hyman (U.S.) ...	410	Invermoriston ...	110	Jan van Haverbeke (Bel) ...	132	Junon (F) ...	212
Henry R. Kenyon (U.S.) ...	418	Hollaenderdybet (Da) ...	176			Investigator (In) ...	57	Jan van Riebeeck (S.A.) ...	117	Jupiter (Sp) ...	342
Henry W. Tucker (U.S.) ...	409	Holland (N) ...	263			Investon ...	107	Janequeo (Chil) ...	151	Jupiter (U.S.) ...	447
Hephaistos (Gr) ...	230	Hollandia (U.S.) ...	386			Invoy ...	57	Janssen (U.S.) ...	419	Jutland ...	32
Heraklis (Gr) ...	230	Hollandsch Diep (N) ...	268	Ibis (I) ...	247	Inya (Bur) ...	143	Jarvis (U.S.) ...	411		
Herald (U.S.) ...	432	Hollis (U.S.) ...	429	Ibrahim-El-Ewal (Eg) ...	287	Iowa (U.S.) ...	388	Jaseur ...	56		
Herauld (F) ...	219	Hollister (U.S.) ...	408	Ibrahim-El-Ewal (Eg) ...	287	Iquique (Chil) ...	148	Jaskolka (Po) ...	289		
Herbert C. Jones (U.S.) ...	419	Holly (U.S.) ...	451	Ilex (Gr) ...	251	Iquitos (P) ...	284	Jasmine (F) ...	214		
Herbert J. Thomas (U.S.) ...	409	Hollyhock (U.S.) ...	457	Ilex (Gr) ...	251	Ira Jeffrey (U.S.) ...	429	Jasmine (U.S.) ...	458		
Hercules ...	16	Holm (Da) ...	173	Igorot (Phil) ...	286	Irex (U.S.) ...	423	Jason (U.S.) ...	446		
Hercules (A) ...	127	Holmön (Sw) ...	353	Ilgao (Phil) ...	286	Iris (U.S.) ...	457	Jastzrab (Po) ...	289		
Hercules (Dom) ...	182	Holt (U.S.) ...	416	Igorot (Phil) ...	286	Ironwood (U.S.) ...	457	Jaunty ...	81		
Hercules (N) ...	270	Holton (U.S.) ...	418	Ili (J) ...	353	Iroquois (R.C.N.) ...	95	Jaurreguiberry (F) ...	203		
Herkimer (U.S.) ...	448	Honolulu (U.S.) ...	403	Iliquois (U.S.) ...	454	Iroquois (U.S.) ...	454	Javeline (F) ...	218		
Hermelyn (N) ...	268	Hoogeveen (N) ...	268	Irtys (Rus) ...	329	Irvine (R.C.M.P.) ...	102	Jean Bart (F) ...	198		
Hermes ...	12	Hooge (G) ...	223	Irkino (Rus) ...	313	Irwine (R.C.M.P.) ...	102	Jeanne d'Arc (F) ...	202		
Hermes (Gr) ...	230	Hoojiro (I) ...	254	Irkuna (J) ...	253	Irwine (U.S.) ...	411	Jed ...	46		
Hermes (U.S.) ...	456	Hooper Island (U.S.) ...	446	Ile d'Oleron (F) ...	219	Ishikari (J) ...	253	Jeffers (U.S.) ...	415		
Hermodur (Ice) ...	232	Hopewell (U.S.) ...	411	Illa Grande (Br) ...	140	Isabella (Phil) ...	286	Jekyl (U.S.) ...	448		
Hernan Corte (Sp) ...	340	Hopi (U.S.) ...	452	Ilern (Sw) ...	351	Isfuglen (Da) ...	175	Jenkins (U.S.) ...	413		
Herdon (U.S.) ...	414	Hopping (U.S.) ...	429	Ilustrion ...	57	Isham ...	58	Jenks (U.S.) ...	418		
Heroína (A) ...	127	Horace A. Bass (U.S.) ...	429	Ilmington ...	57	Ishikari (J) ...	253	Jesse Rutherford (U.S.) ...	417		
Heron (U.S.) ...	545	Hornbeam (U.S.) ...	457	Ilocus Norte (Phil) ...	286	Isherwood (U.S.) ...	412	Jewel ...	56		
Herring Gull (R.C.N.) ...	100	Hornbill (U.S.) ...	433	Ilocus Sur (Phil) ...	286	Isin (T) ...	370	Jhelum (R.P.N.) ...	114		
Hessa (Nor) ...	277	Hornet (U.S.) ...	380	Iloilo (Phil) ...	285	Iskatel (Rus) ...	322	Jicarilla (U.S.) ...	452		
Hessen (Ru) ...	325	Horsham (R.A.N.) ...	89	Iltson ...	285	Iskikari (J) ...	253	Jo (Nor) ...	276		
Howell (U.S.) ...	448	Horta (Port) ...	296	Ily Muromvets (Rus) ...	331	Iskra (Po) ...	289	João de Lisboa (Port) ...	293		
Hexton ...	57	Hortensia (F) ...	214	Imbattable (F) ...	220	Isle Royal (U.S.) ...	445	Jobb (U.S.) ...	416		
Heylinger (U.S.) ...	417	Hotham ...	56	Imersay ...	65	Islochidori (J) ...	254	Joh L. Kruger (G) ...	221		
Heywood L. Edwards (U.S.) ...	411	Hound ...	56	Imjin (Kor) ...	255	Isonami (J) ...	254	Johan Maurits (N) ...	264		
Hibiki (Rus) ...	312	Houston (U.S.) ...	402	Impeccable (U.S.) ...	432	Isonami (J) ...	254	Johan Nordenacker (Sw) ...	355		
Hickleton ...	57	Hova (F) ...	207	Imperial Marinheiro (Br) ...	138	Isonzo (I) ...	251	John A. Bole (U.S.) ...	410		
Hickory (U.S.) ...	458	Hovingham ...	58	Impervious (U.S.) ...	432	Istranka (Yu) ...	468	John Adams (Iri) ...	236		
Hickory Lake (Rus) ...	322	Howard D. Crow (U.S.) ...	419	Impetueux (F) ...	214	Istria (Rus) ...	330	John C. Butler (U.S.) ...	417		
Hickox (U.S.) ...	411	Howard F. Clark (U.S.) ...	417	Impetuoso (I) ...	243	Istria (Rus) ...	330	John D. Henley (U.S.) ...	412		
Hidatsa (U.S.) ...	452	Howard W. Gilmore (U.S.) ...	444	Implacable (U.S.) ...	13	Istria (Rus) ...	330	John Hood (U.S.) ...	411		
Higbee (U.S.) ...	409	Howe ...	19	Implacable (F) ...	220	Istria (Rus) ...	330	John L. Williamson (U.S.) ...	417		
Highburton ...	57	Howorth (U.S.) ...	412	Implacable (F) ...	220	Istria (Rus) ...	330	John L. Sullivan (U.S.) ...	451		
Hilarity (U.S.) ...	432	Hsien Ning (C) ...	161	Implicit (U.S.) ...	432	Istria (Rus) ...	330	John P. Gray (U.S.) ...	429		
Hilbert (U.S.) ...	421	Hsin An (C) ...	155	Inaugural (U.S.) ...	432	Istria (Rus) ...	330	John Paul Jones (U.S.) ...	406		
Hildersham ...	58	Hsin Feng (C) ...	153	Inch (U.S.) ...	432	Istria (Rus) ...	330	John Q. Roberts (U.S.) ...	429		
Hill (U.S.) ...	419	Hsin Kao (C) ...	163	Inch Arran (R.C.N.) ...	419	Istria (Rus) ...	330	John R. Craig (U.S.) ...	408		
Hinai (R.N.Z.N.) ...	111	Hsin Yang (C) ...	158	Inchkeith (R.N.Z.N.) ...	111	Istria (Rus) ...	330	John R. Pierce (U.S.) ...	410		
Hinazura (J) ...	254	Hua-Yang (C) ...	160	Ickford ...	63	Istria (Rus) ...	330	John Rodgers (U.S.) ...	412		
Hind ...	44	Huai Ho (C) ...	153	Inconstant (F) ...	214	Istria (Rus) ...	330	John S. McCain (U.S.) ...	405		
Hinksford ...	63	Huang Ho (C) ...	153	Incredible (U.S.) ...	432	Istria (Rus) ...	330	John W. Thomason (U.S.) ...	410		
Hinthia (Bur) ...	143	Hubbard (U.S.) ...	153	Indaw (Bur) ...	143	Istria (Rus) ...	330	John W. Weeks (U.S.) ...	410		
Hirado (J) ...	253	Hubberston ...	57	Indefatigable ...	13	Istria (Rus) ...	330	Johnnie Hutchins (U.S.) ...	417		
Hissom (U.S.) ...	419	Hudson (U.S.) ...	412	Independencia (Dom) ...	180	Istria (Rus) ...	330	Johnston (U.S.) ...	408		
Hitchiti (U.S.) ...	452	Hue (F) ...	214	India (G) ...	223	Istria (Rus) ...	330	Jonquierre (R.C.N.) ...	97		
Hitra (Nor) ...	277	Huemul (Chil) ...	151	Indian Island (U.S.) ...	447	Istria (Rus) ...	330	Jonquil (U.S.) ...	457		
Hiyodori (J) ...	254	Huei Fen (C) ...	162	Indiana (U.S.) ...	389	Istria (Rus) ...	330	Jonquille (F) ...	214		
Hjaelperen (Da) ...	176	Hueigat (F) ...	220	Indicative (Rus) ...	321	Istria (Rus) ...	330	Jorgé Juan (Sp) ...	339		
Hjorto (Da) ...	176	Hueigat (F) ...	220	Indiscret (F) ...	214	Istria (Rus) ...	330	José Bonifacio (Br) ...	139		
Ho Chang (C) ...	163	Hugh Purvis (U.S.) ...	410	Indomitable ...	14	Istria (Rus) ...	330	José Luis Diez (Sp) ...	339		
Ho Cheng (C) ...	163	Hui An (C) ...	152	Indomito (I) ...	243	Istria (Rus) ...	330	José Martí (Cu) ...	168		
Ho Chien (C) ...	153	Hui Yang (C) ...	160	Indra (U.S.) ...	446	Istria (Rus) ...	330	Joseph C. Hubbard (U.S.) ...	429		
Ho Chih (C) ...	163	Huifeldt (Da) ...	173	Infatigable (F) ...	220	Istria (Rus) ...	330	Joseph E. Campbell (U.S.) ...	429		
Ho Ching (C) ...	163	Hukchownan (Kor) ...	255	Infatigable (F) ...	220	Istria (Rus) ...	330	Joseph E. Connolly (U.S.) ...	417		
Ho Chun (C) ...	163	Humaita (Para) ...	273	Infect (U.S.) ...	432	Istria (Rus) ...	330	Joseph P. Kennedy, Jr. (U.S.) ...	403		
Ho Chung (C) ...	163	Humberto Cortes (Col) ...	166	Ingeniero Gadda (A) ...	128	Istria (Rus) ...	330	Jouvenne (F) ...	220		
Ho Hseuh (C) ...	155	Humboldt (U.S.) ...	454	Ingeniero Iribas (A) ...	128	Istria (Rus) ...	330	Joyce (U.S.) ...	420		
Ho Yung (C) ...	153	Hummer (U.S.) ...	433	Ingenieur Eli Monnier (F) ...	218	Istria (Rus) ...	330	Juan Alejandro Acosta (Dom) ...	178		
Hobart (R.A.N.) ...	85	Humming Bird (U.S.) ...	433	Ingenieur en Chef Girod (F) ...	216	Istria (Rus) ...	330	Juan Bautista Cambiaso (Dom) ...	178		
Hobby (U.S.) ...	414	Hung Tse (C) ...	162	Ingenieur-Hydrographe Nicolas (F) ...	216	Istria (Rus) ...	330	Juan Bautista Maggioriolo (Dom) ...	178		
Hobein (N) ...	270	Hunt (U.S.) ...	411	Ingersoll (U.S.) ...	216	Istria (Rus) ...	330	Juan de la Cosa (Sp) ...	343		
		Hunter ...	72	Ingham (U.S.) ...	455	Istria (Rus) ...	330	Juan Lucio (Col) ...	166		
		Hunter Marshall (U.S.) ...	429	Inglesham ...	58	Istria (Rus) ...	330				



# GENERAL INDEX—continued

# KASHI (J)—LOCH CRAGGIE

K—continued		KIN—KRA		KRA—La B		La B—LAR		LAR—LES		LES—LOC	
	Page		Page		Page		Page		Page		Page
KAS—KIN		King George V	19	Kraken (U.S.)	424	La Bayonnaise (F)	213	Lark (U.S.)	433	Leslie L. B. Knox (U.S.)	416
Kashi (J)	252	King Salvor	74	Kram (Th)	361	La Belle-Poule (F)	220	Las Villas (Cu)	169	Letchik (Rus)	320
Kaskaskia (U.S.)	449	Kingarth	74	Krambol (Rus)	322	La Boudeuse (F)	208	Lasham	58	Leticia (Col)	166
Kastalia (Gr)	229	Kingbird (U.S.)	433	Krasnaya Abkhazia (Rus)	326	La Bourdonnais (F)	203	Laska (Rus)	325	Letterston	57
Katanpää (Fin)	190	Kingfish (U.S.)	425	Krasnaya Armenia (Rus)	326	La Capricieuse (F)	208	Lassen (U.S.)	445	Leucoton (Chil)	149
Katashima (Rus)	323	Kingfisher	73	Krasnaya Gruiza (Rus)	326	La Charente (F)	219	Lasso	74	Leverton	57
Katoku (J)	245	Kingfisher (R.C.N.)	100	Krasni Ajaristan (Rus)	326	La Confiance (F)	206, 463	Latimer (U.S.)	436	Leviathan	16
Katoomba (R.A.N.)	89	Kingman (U.S.)	451	Krasni Azarbaijan (Rus)	326	La Créole (F)	210	Latrobe (R.A.N.)	89	Levy (U.S.)	421
Kaura (Nor)	275	Kingsford	63	Krasni Kavkaz (Rus)	308	La Découverte (F)	206	Laub (U.S.)	414	Lewis (U.S.)	417
Kaw (U.S.)	458	Kingsport Victory (U.S.)	448	Krasni Krim (Rus)	308	La Dunkerquoise (F)	213	Laubie (F)	211	Lewis Hancock (U.S.)	411
Kawasemi (J)	254	Kinloss	74	Krasniburiat (Rus)	326	La Dieppoise (F)	213	Launceston Castle	50	Lexington (U.S.)	380
Kawishiwi (U.S.)	449	Kinterbury	80	Krasnimongol (Rus)	326	La Fayette (F)	196	Laura (Dom)	181	Leyte (Phil)	285
Kaya (J)	252	Kinzer (U.S.)	429	Krasnimoryak (Rus)	326	La Gracieuse (F)	208	Laurel (U.S.)	457	Leyte (U.S.)	381
Kaya (Rus)	313	Kios (J)	253	Krasnivostok (Rus)	326	La Grandière (F)	205	Laurentia (U.S.)	447	Liamone (F)	219
Kearny (U.S.)	414	Kiowa (U.S.)	452	Krasnoye Znamya (Rus)	327	La Hulloise (R.C.N.)	97	Laurencville (R.C.N.)	102	Libertad (Dom)	180
Kearsarge (U.S.)	380	Kiri (Rus)	313	Krassin (Rus)	331	La Lorientaise (F)	213	Laurier (F)	213	Libra (I)	245
Kedleston	57	Kirkliston	57	Krech (Rus)	314	La Malouine (F)	213	Laurindo Pitta (Vr)	140	Libra (U.S.)	437
Keeten (N)	269	Kirkpatrick (U.S.)	420	Kretchmer (U.S.)	419	La Mayenne (F)	219	Lauzon (R.C.N.)	97	Liddle (U.S.)	429
Kefallinia (Gr)	229	Kiroki (Kor)	255	Krieger (Da)	173	La Moqueuse (F)	208	Lavaca (U.S.)	436	Lidofjard (Sw)	354
Keith (U.S.)	419	Kirov (Rus)	306, 315, 326	Krishna (U.S.)	446	La Paimpolaise (F)	213	Lawrence C. Taylor (U.S.)	417	Lieng Chieh (C)	163
Kellington	57	Kirovets (Rus)	320	Krisjans Valdermaras (Rus)	331	La Pataia (A)	129	Laws (U.S.)	412	Lieng Cheng (C)	163
Kelton	57	Kirte (T)	368	Krogulec (Po)	289	La Perouse (F)	209	Laxen (Da)	175	Lieng Chu (C)	163
Kemer (T)	368	Kirwin (U.S.)	429	Kronos (Gr)	230	La Plata (A)	126	Laymore (R.C.N.)	101	Lieng Hwa (C)	163
Kemerton	57	Kishwaukee (U.S.)	450	Krut (Sw)	354	La Prade (U.S.)	417	Laysan Island (U.S.)	451	Lieng Li (C)	163
Kempenfelt	35	Kistna (In)	106	Ku Chou (C)	153	La Rioja (A)	126	Lazaga (Sp)	338	Lieng Pi (C)	153
Kendal C. Campbell (U.S.)	417	Kitakami (J)	253	Ku Lun (C)	162	La Saone (F)	219	Lazar Kaganovitch (Rus)	331	Lieng Sheng (C)	163
Kendrick (U.S.)	414	Kite (U.S.)	433	Kuai (C)	153	La Seine (F)	219	Le Basque (F)	206	Lieng Tseng (C)	163
Kenilworth Castle	50	Kittiwake (U.S.)	451	Kuang Chou (C)	152	La Sétoise (F)	216	Le Bordaia (F)	206	Lieng Ying (C)	163
Kennebago (U.S.)	449	Kiwi (R.N.Z.N.)	111	Kuha (Fin)	190	La Surprise (F)	206	Le Boulonnais (F)	206	Lientur (Chil)	149
Kennebec (U.S.)	449	Kiyonami (J)	254	Kuibyshev (Rus)	312	La Toulonnaise (F)	216	Le Brestois (F)	206	Lieut. George W. G. Boyce (U.S.)	448
Kenneth D. Bailey (U.S.)	409	Kiyotsuki (J)	254	Kukui (U.S.)	458	La Vallette (U.S.)	412	Le Breton (F)	206	Lieut. James E. Robinson (U.S.)	448
Kenneth M. Willett (U.S.)	417	Kield (Nor)	276	Kula Gulf (U.S.)	385	Laaland (Da)	176	Le Brix (F)	209	Lieut. Robert Craig (U.S.)	448
Kenneth Whiting (U.S.)	434	Kiamath (U.S.)	454	Kullen (Sw)	353	Labrador (R.C.N.)	101	Le Corse (F)	206	Lifeline	74
Kenora (R.C.N.)	99	Klas Horn (Sw)	350	Kuma (J)	253	Lac Chambon (F)	219	Le Fantasque (F)	203	Lilac (U.S.)	458
Kent Island (U.S.)	447	Kleber (F)	204	Kumano (J)	253	Lac Tchad (F)	219	Le Jeune (U.S.)	441	Lilas (U.S.)	213
Kentavros (Gr)	230	Kled Keo (Th)	361	Kunitza (Rus)	325	Lac Tonle-Sap (F)	219	Le Lorrain (F)	204	Lilas (F)	213
Kentucky (U.S.)	388	Kleinsmith (U.S.)	429	Kuribasi (J)	254	Lachlan (R.N.Z.N.)	112	Le Maire (A)	129	Lima (Port)	292
Kentville (R.C.N.)	99	Kline (U.S.)	429	Kurokami (J)	253	Lacoga (Rus)	328	Le Malin (F)	203	Limburg (N)	263
Kenya	26	Klissoura (Gr)	229	Kurtaran (T)	369	Ladya (Th)	360	Le Mekong (F)	219	Limpkin (U.S.)	433
Keosauqua (U.S.)	452	Klondike (U.S.)	445	Kuryong Yo (Kor)	255	Laertes	56	Le Ray Wilson (U.S.)	417	Limol	79
Kephart (U.S.)	429	Klongyai (Th)	358	Kusadasi (T)	368	Laertes (U.S.)	446	Le Terrible (F)	203	Limnos (Gr)	230
Keppel	41	Klördyb (Da)	175	Kusagaki (J)	253	Laffaux (F)	212	Le Triomphant (F)	203	Linan (C)	159
Keppler (U.S.)	406	Knapp (U.S.)	411	Kusu (J)	252	Laffey (U.S.)	410	Le Verrier (F)	209	Linden (U.S.)	458
Kerempe (T)	368	Knatesborough Castle	50	Kut (Th)	361	Lagos	33	Leader (U.S.)	432	Lindenwald (U.S.N.)	438
Kerkyra (Gr)	229	Knave (U.S.)	432	Kuzuryu (J)	253	Lagos (Port)	295	League Island (U.S.)	447	Lindholm (Da)	175
Kermic Roosevelt (U.S.)	446	Knight (U.S.)	415	Kuwalsan (Kor)	255	Laguna (Phil)	286	Leary (U.S.)	409	Lindsfarne	65
Kern (U.S.)	450	Knudson (U.S.)	429	Kwajalein (U.S.)	386	Lahore (R.P.N.)	116	Lebedj (Rus)	327	Lindormen (Da)	174
Kersaint (F)	203	Knurrhahn (G)	223	Kwang Kuo (C)	153	Laïta (F)	218	Ledbury	49	Lindsey (U.S.)	415
Kershaw (U.S.)	436	Koala (R.A.N.)	89	Kwangju (Kor)	255	Lajes (Port)	296	Ledsham	58	Lindsey (U.S.)	424
Keshi (J)	252	Koaner (U.S.)	419	Kya (Nor)	275	Lake Champlain (U.S.)	380	Lee Fox (U.S.)	429	Liniars (Sp)	338
Kestrel (U.S.)	433	Kojo Maru (J)	254	Kyne (U.S.)	421	Lake Lanoa (Phil)	286	Leeds Castle	50	Linnat	68
Key (U.S.)	417	Koka (U.S.)	452	Kynn (Nor)	275	Lake Naujan (Phil)	286	Leersum (N)	268	Linnat (U.S.)	433
Keywadin (U.S.)	452	Kolam (Th)	361	Kyodo Maru (J)	254	Lake Taal (Phil)	286	Lefkas (Gr)	229	Lioba (U.S.)	447
Khalki (Gr)	230	Komadori (J)	254	Kyonju (Kor)	255	Lakewood (R.C.N.)	101	Legare (U.S.)	456	Lioness	56
Khamronsin (Th)	360	Kommuna (Rus)	330	Kythira (Gr)	230	Laleston	57	Legazpi (Sp)	340	Lionfish (U.S.)	424
Khazan (Rus)	326	Kompass (Rus)	327			Lamego (Br)	140	Legionnaire (F)	214	Lipian (U.S.)	452
Khoryok (Rus)	325	Kompass (Sw)	355			Lamons (U.S.)	421	Lehovon (Gr)	230	Lipian (U.S.)	330
Khrabri (Bul)	141	Komsomolyet (Rus)	328			Lamprey (U.S.)	424	Leie (Bel)	133	Liri (Rus)	213
Kiama (R.N.Z.N.)	110	Kondor (Po)	289			Lanark (R.C.N.)	97	Leland E. Thomas (U.S.)	417	Liscen (F)	268
Kiang Kun (C)	155	Kondor (Rus) 2 ships	314, 327			Lancaster Castle	50	Lembit (Rus)	319	Lisse (N)	102
Kiji (J)	254	Kongedybet (Da)	176			Lancetfish (U.S.)	424	Lena (Rus)	328	Listerville (R.C.N.)	107
Kiji (Rus)	314	Konkan (In)	107			Lancier (F)	214	Lenawee (U.S.)	436	Liston	89
Kiku (J)	252	Konstruktor (Rus)	320			Landsort (Sw)	353	Lenawee (U.S.)	436	Lithgow (R.A.N.)	402
Kidd (U.S.)	411	Konteradmiral Khoroshkhin (Rus)	322			Langeland (Da)	176	Lenin (Rus) 2 ships	326, 331	Little Rock (U.S.)	58
Kikuchi (J)	253	Kootenay (R.C.N.)	98			Laning (U.S.)	429	Leningrad (Rus)	312	Littleham	360
Kilchu (Kor)	255	Kordofan (Eg)	188			Lanoo (Phil)	286	Leningrad Sovyet (Rus)	328	Littom (Th)	414
Kilimli (T)	368	Kormoran (Po)	289			Lanton	57	Lennox	56	Livermore (U.S.)	27
Killegray (R.N.Z.N.)	111	Korshun (Rus)	314			L'aulne (F)	219	Leo (U.S.)	437	Liverpool	424
Killen (U.S.)	412	Kortzenzer (N)	263			L'Aventure (F)	206	Leon (Gr)	227	Lizardfish (U.S.)	41
Kim Gan Sang (Kor)	255	Koshiki (J)	253			L'Emporte (F)	419	Leonard F. Mason (U.S.)	408	Llandaff	41
Kimball (U.S.)	456	Koster (Sw)	353			L'Escarmouche (F)	206	Leoncio Prado (Cu)	169	Llewellyn (R.C.N.)	100
Kimberley (U.S.)	412	Kotaka (J)	254			L'Eveille (F)	214	Leonor (Dom)	182	Lloyd (U.S.)	429
Kimchon (Kor)	255	Koziozoc (Po)	289			L'Impetueux (F)	214	Leopard	41	Lloyd E. Acree (U.S.)	417
Kimpae (Kor)	255	Kozlu (T)	368			L'Inconstant (F)	214	Lepanto (Sp)	339	Lloyd Thomas (U.S.)	406
Kimhaeho (Kor)	255	Kozu (J)	253			L'Indiscret (F)	214	Lerez (Sp)	329	Lobelia (F)	213
Kinbrace	74	Kozu (Rus)	313			L'Intrepide (F)	214	Leros (Gr)	242	Lobelia (F)	283
King (A)	127	Krabbe (Da)	173			La Atrevida (Col)	166	Leruse (F)	214	Loch Alvie	43
		Krajina (Uu)	468			La Argentina (A)	124	Les Eclairiers (A)	129	Loch Arkraig	43
						La Baise (F)	219	Les Vosges (F)	216	Loch Craggie	43

L—continued		MAA—MAL		MAL—MAR		MAR—MEP		MER—MIR		MIR—MON	
LOC—LYS	Page	M	Page		Page		Page		Page		Page
Loch Dunvegan ...	43	Maagen (Da) ...	176	Malouine (F) ...	213	Martin H. Ray (U.S.) ...	419	Merapi (U.S.) ...	447	Mircea (Ro) ...	299
Loch Fada ...	43	Macabi (U.S.) ...	424	Maloy (U.S.) ...	418	Martinet ...	75	Merbabu (Ind) ...	235	Mirth (Rus) ...	321
Loch Fyne ...	43	MacBrien (R.C.M.P.) ...	102	Malpeque (R.C.N.) ...	99	Marty (Rus) ...	323	Mercer (U.S.) ...	451	Mirto (I) ...	248
Loch Glendhu ...	43	McCaffery (U.S.) ...	406	Malzyin (Rus) ...	331	Marvel ...	56	Mercury (U.S.) ...	447	Misamis Oriental (Phil) ...	286
Loch Gorm ...	43	McClelland (U.S.) ...	421	Malzwin (N) ...	269	Marvel (Rus) ...	321	Mercuur (N) ...	270	Miseno (I) ...	251
Loch Insh ...	43	McConnell (U.S.) ...	421	Mameluck (F) ...	214	Mary Rose ...	56	Meredith (U.S.) ...	408	Misgav (Is) ...	237
Loch Killin ...	43	McCook (U.S.) ...	415	Mammouth (F) ...	220	Maryland (U.S.) ...	391	Merepoe (Rus) ...	327	Missiones (A) ...	125
Loch Killisport ...	43	McCord (U.S.) ...	412	Manabi (Ec) ...	184	Mascoma (U.S.) ...	449	Merganser (U.S.) ...	433	Misnak (Is) ...	237
Loch Lomond ...	43	McCook (U.S.) ...	415	Manatee (U.S.) ...	449	Mashinist (Rus) ...	320	Meric (T) ...	367	Misspillon (U.S.) ...	449
Loch More ...	43	McCoy Reynolds (U.S.) ...	417	Manayunk (U.S.) ...	451	Massachusetts (U.S.) ...	389	Meriwether (U.S.) ...	436	Mission Bay (U.S.) ...	386
Loch Quoiich ...	43	McCracken (U.S.) ...	436	Manazoru (J) ...	254	Massey (U.S.) ...	410	Mermid ...	44	Mission Buenaventura (U.S.) ...	449
Loch Ruthven ...	43	McCulloch (U.S.) ...	434	Manchester (U.S.) ...	402	Mastgat (N) ...	269	Mermoz (F) ...	209	Mission Capistrano (U.S.) ...	449
Loch Scavaig ...	43	McDermut (U.S.) ...	411	Mandate ...	56	Mastino (I) ...	249	Mero (U.S.) ...	424	Mission Carmel (U.S.) ...	449
Loch Tarbert ...	43	McGinty (U.S.) ...	417	Mandovi (Port) ...	295	Mataco (A) ...	130	Merrick (U.S.) ...	437	Mission de Pala (U.S.) ...	449
Loch Tralaig ...	43	McGowan (U.S.) ...	417	Mango (U.S.) ...	451	Matagorda (U.S.) ...	454	Merrickville (R.C.N.) ...	102	Mission Dolores (U.S.) ...	449
Loch Veyatie ...	43	Macha (Iri) ...	236	Mangyan (Phil) ...	286	Matanikau (U.S.) ...	386	Merrill (U.S.) ...	419	Mission Loreto (U.S.) ...	449
Lochem (N) ...	268	Machitis (Gr) ...	228	Manila Bay (U.S.) ...	386	Matanzas (Cu) ...	169	Merrimack (U.S.) ...	449	Mission Los Angeles (U.S.) ...	449
Lochy ...	46	Machitit (U.S.) ...	417	Mannitou (U.S.) ...	458	Matapan ...	32	Mersham ...	58	Mission Purisima (U.S.) ...	449
Locotenent-Comandor Stihl		Mack (U.S.) ...	414	Manning (U.S.) ...	418	Mataphon (Th) ...	361	Mertz (U.S.) ...	411	Mission San Antonio (U.S.) ...	449
Eugen (Ro) ...	299	Mackenzie (U.S.) ...	454	Mannville (R.C.N.) ...	102	Matarip (Br) ...	140	Mervine (U.S.) ...	415	Mission San Carlos (U.S.) ...	449
Locust (U.S.) ...	451	Mackinac (U.S.) ...	454	Mano (Da) ...	176	Matchless ...	36	Mesquite (U.S.) ...	457	Mission San Diego (U.S.) ...	449
Loeser (U.S.) ...	418	McKee (U.S.) ...	409	Mansfield (U.S.) ...	410	Mathews (U.S.) ...	437	Messina ...	71	Mission San Fernando (U.S.) ...	449
Lofberg (U.S.) ...	410	Mackinaw (U.S.) ...	456	Manta (U.S.) ...	427	Matroist (Rus) ...	320	Meuse (Bel) ...	133	Mission San Francisco (U.S.) ...	449
Lofoten ...	72	McLanahan (U.S.) ...	414	Manxman ...	27	Matros (Rus) ...	322	Metaco (U.S.) ...	452	Mission San Gabriel (U.S.) ...	449
Logan (U.S.) ...	436	McLane (U.S.) ...	456	Maoz (Is) ...	237	Matru (Eg) ...	188	Metelj (Rus) ...	320	Mission San José (U.S.) ...	449
Loggerhead (U.S.) ...	424	McNair (U.S.) ...	411	Maple (U.S.) ...	424	Matsu (J) ...	252	Metcalfe (U.S.) ...	412	Mission San Juan (U.S.) ...	449
Loke (Sw) ...	355	McNulty (U.S.) ...	416	Maquoketa (U.S.) ...	450	Mattabesset (U.S.) ...	450	Meteor ...	36	Mission San Luis Obispo (U.S.) ...	449
Lom (Nor) ...	276	Macomb (U.S.) ...	414	Maranoa (Phil) ...	286	Mattaponi (U.S.) ...	446	Meteor (Sp) ...	338	Mission San Luis Rey (U.S.) ...	449
Lomba (Br) ...	140	Macon (U.S.) ...	397	Maranon (P) ...	284	Mau (U.S.) ...	446	Method (Rus) ...	321	Mission San Miguel (U.S.) ...	449
Lommen (Th) ...	175	Macquarie (R.A.N.) ...	88	Marasti (Ro) ...	297	Maua Loa (U.S.) ...	445	Métivier (U.S.) ...	416	Mission Santa Ana (U.S.) ...	449
Longlom (Da) ...	360	Maddox (U.S.) ...	410	Marasti (Ro) ...	297	Maurice J. Manuel (U.S.) ...	417	Mewa (Po) ...	289	Mission Santa Barbara (U.S.) ...	449
Longspur (U.S.) ...	433	Madeira (Port) ...	294	Marasteri ...	297	Mauritius ...	26	Meynell ...	49	Mission Santa Clara (U.S.) ...	449
Loon (R.C.N.) ...	100	Madison ...	57	Maraunder ...	81	Mauritius ...	443	Miami (U.S.) ...	402	Mission Santa Cruz (U.S.) ...	449
Loreto (P) ...	284	Madison (U.S.) ...	414	Marceau (F) ...	204	Maxwell ...	57	Miaoulis (Gr) ...	227	Mission Santa Ynez (U.S.) ...	449
Lorientaise (F) ...	213	Madras (In) ...	107	Marcel le Bihan (F) ...	209	Mayenne (F) ...	219	Micalvi (Chil) ...	150	Mission Soledad (U.S.) ...	449
Lorikeet (U.S.) ...	433	Madrona (U.S.) ...	457	Marchand (U.S.) ...	419	Mayford ...	63	Micka (U.S.) ...	421	Mississinewa (U.S.) ...	449
Lorrain (F) ...	204	Madryn (A) ...	128	Marcello Dias (Br) ...	157	Mayo (U.S.) ...	414	Mickleham ...	58	Mississippi (U.S.) ...	435
Los Angeles (U.S.) ...	397	Maenad ...	56	Marcus Island (U.S.) ...	386	Mayu (Bur) ...	142	Micmac (R.C.N.) ...	95	Misoula (U.S.) ...	436
Lot (Rus) ...	327	Maev (Iri) ...	236	Margaree (R.C.N.) ...	98	Mazama (U.S.) ...	445	Midas (U.S.) ...	446	Missouri (U.S.) ...	388
Loto (I) ...	248	Magallanes (Sp) ...	340	Marguerite (F) ...	213	Meade (U.S.) ...	414	Middleton ...	49	Mistletoe (U.S.) ...	457
Lotus (F) ...	215	Magar (In) ...	108	Maria Julia (Ice) ...	232	Meadow Lark (U.S.) ...	433	Midway (U.S.) ...	379	Mitcher (U.S.) ...	405
Lougen (Da) ...	176	Magicienne ...	56	Maria Josefina (Dem) ...	180	Mearim (Br) ...	138	Miffin (U.S.) ...	436	Mitvakh (Is) ...	237
Lough (U.S.) ...	416	Magne (Sw) ...	350	Marias (U.S.) ...	449	Measure (Rus) ...	321	Miguel de Cervantes (Sp) ...	336	Miyake (J) ...	253
Louisville (U.S.) ...	398	Magnet ...	75	Marich (Ind) ...	235	Meda ...	64	Mikoyan (Rus) ...	331	Mizutori (J) ...	254
Lovelace (U.S.) ...	418	Magnificent (R.C.N.) ...	93	Marieholm (SW) ...	354	Mediator ...	81	Milekura (J) ...	253	Mjölner (Sw) ...	350
Lowe (U.S.) ...	419	Magnolia (F) ...	213	Marietta (U.S.) ...	451	Medicine Hat (R.C.N.) ...	99	Mileham ...	89	Moale (U.S.) ...	410
Lowry (U.S.) ...	410	Magnolia (I) ...	248	Marine Adder (U.S.) ...	442	Medregal (U.S.) ...	423	Mille (F) ...	211	Mobile (U.S.) ...	402
Loy (U.S.) ...	429	Magnolia (U.S.) ...	457	Marine Lynx (U.S.) ...	442	Meerkatz (G) ...	223	Miller (U.S.) ...	412	Mochizuki (J) ...	254
Loyalty (U.S.) ...	432	Magoffin (U.S.) ...	436	Marine Carp (U.S.) ...	442	Megara (U.S.) ...	446	Millicom (U.S.) ...	449	Mockingbird (U.S.) ...	433
Lo-Yang (C) ...	160	Magpie ...	44	Marine Fiddler (U.S.) ...	448	Mei Chen (C) ...	163	Mills (U.S.) ...	419	Mocobi (U.S.) ...	452
Luang-Prabang (F) ...	214	Magpie (U.S.) ...	433	Marine Phoenix (U.S.) ...	442	Mei Heng (C) ...	163	Milltown (R.C.N.) ...	99	Mode (Sw) ...	350
Lubbock (U.S.) ...	436	Mahone (R.C.N.) ...	99	Marine Serpent (U.S.) ...	442	Mei Ho (C) ...	163	Milne ...	36	Modeste ...	44
Lucafarul (Ro) ...	299	Mahoning (U.S.) ...	458	Marino Alves (Br) ...	140	Mei Hung (C) ...	163	Milos (Gr) ...	230	Mogami (J) ...	253
Lu Chan (C) ...	163	Mahopec (U.S.) ...	452	Mario Serpo (Col) ...	166	Mei Lo (C) ...	163	Mimosa (F) ...	213	Mohamed Ali El Kabir (Eg) ...	187
Lucid (U.S.) ...	432	Mahroussa (Eg) ...	188	Marion (U.S.) ...	456	Mei Peng (C) ...	163	Mimosa (U.S.) ...	451	Mohican (U.S.) ...	458
Ludham ...	58	Maidstone ...	70	Mariposa (U.S.) ...	457	Mei Sung (C) ...	163	Mina (Rus) ...	322	Molala (U.S.) ...	452
Luga (Rus) ...	320	Maillé-Brézé (F) ...	203	Mariz E. Barros (Br) ...	137	Mei Yi (C) ...	163	Minah (U.S.) ...	433	Molene (F) ...	220
Luigi di Savoia Duca delgi Abruzzi		Mainstay (U.S.) ...	432	Marjolaine (F) ...	214	Mei Yuan (C) ...	154	Minas (R.C.N.) ...	99	Molnya (Rus) ...	315
(I) ...	242	Maipo (Chil) ...	151	Mark (U.S.) ...	448	Mekhanik (Rus) ...	320	Mincio (I) ...	251	Molosso (I) ...	249
Luiseno (U.S.) ...	452	Maire (A) ...	129	Markab (U.S.) ...	445	Melbourne (R.A.N.) ...	84	Mindanao (U.S.) ...	446	Melotov (Rus) ...	306
Luitenant ter zee Victor Billet		Marken II (N) ...	359	Markin (U.S.) ...	320	Melbreak ...	48	Mindoro (U.S.) ...	385	Momi (J) ...	252
(Bel) ...	132	Markin (Rus) ...	418	Marlboro (U.S.) ...	451	Melita ...	56	Miner (Yu) ...	467	Mona Island (U.S.) ...	446
Lullington ...	57	Makassar Strait (U.S.) ...	386	Marmar (T) ...	367	Mellet (U.S.) ...	436	Miner I-VIII ...	68	Monitor (U.S.) ...	438
Lundy ...	65	Makrelen (Da) ...	175	Marmion ...	56	Melvin (U.S.) ...	411	Minerva (I) ...	247	Monongahela (U.S.) ...	449
Lunga Point (U.S.) ...	386	Maksim Gorki (Rus) ...	306	Marnie ...	36	Melvin R. Newman (U.S.) ...	417	Ming Chuan (C) ...	153	Monrovia (U.S.) ...	436
Luymes (N) ...	269	Malabar (F) ...	220	Marnix (N) ...	264	Mender (U.S.) ...	452	Mingo (U.S.) ...	425	Monssen (U.S.) ...	411
Luzon (U.S.) ...	446	Malabar (U.S.) ...	447	Marocain (F) ...	207	Mendez Nunez (Sp) ...	337	Minneapolis (U.S.) ...	399	Montague (U.S.) ...	437
Lyman K. Swenson (U.S.) ...	410	Malasipina (Sp) ...	343	Marquette (U.S.) ...	437	Mendota (U.S.) ...	454	Minnetonka (U.S.) ...	454	Montcalm (F) ...	201
Lynaes (Da) ...	175	Malcolm ...	41	Marsdiep (N) ...	268	Medusa (N) ...	269	Mines (U.S.) ...	446	Montcalm (Rus) ...	332
Lynx ...	41	Maldonado (Ur) ...	460	Marsh (U.S.) ...	418	Menelaus (U.S.) ...	446	Minotaur (U.S.) ...	446	Montclair ...	70
Lynx (N) ...	268	Malek Fuad (Eg) ...	188	Marshall (U.S.) ...	411	Menges (U.S.) ...	419	Minrep (Rus) ...	322	Monte Cristo (I) ...	251
Lyo (Da) ...	176	Malgache (F) ...	207	Marsouin (F) ...	210	Menfee (U.S.) ...	436	Minsk (Rus) ...	312	Montecucco (Rus) ...	330
Lysander ...	56	Malin (F) ...	203	Marsuinul (Ro) ...	298	Meneminee (U.S.) ...	452	Minyor (Rus) ...	322	Montegrappa (I) ...	250
		Mallard (R.C.N.) ...	100	Marte (Sp) ...	342	Meon ...	71	Mirage (F) ...	220	Monterey (U.S.) ...	384
		Mallard (U.S.) ...	433	Martin Alonso Pinzon (Sp) ...	340	Meppel (N) ...	266	Miramichi (R.C.N.) ...	100	Montevideo (Ur) ...	459

## GENERAL INDEX—continued.

## MONTPELIER (U.S.)—PARANA (A)

M—continued		MYE—NEP		NEP—NOR		NOR—OLI		OLJ—OSN		PAN—PER	
MON—MVI	Page	Myers (U.S.)	Page	Neptun (Sw)	Page	Norton Sound (U.S.)	Page	Oljaren (Sw)	Page	Osornoi (Rus)	Page
Montpelier (U.S.)	402	Myles C. Fox (U.S.)	409	Neptune (U.S.)	446	Notable (U.S.)	432	Olmo (I)	248	Osprey (U.S.)	433
Montrose (U.S.)	436	Myngs	35	Neptuno (Port)	294	Noshiro (J)	253	Olmsed (U.S.)	436	Ossington	57
Moon	56	Myuhyngsan (Kor)	255	Neptuno (Sp)	342	Noto (J)	253	Olma	78	Ossory	56
Moorburn	75	Myosotis (F)	213	Nereida (Mex)	258	Notre Dame D'Etel (F)	220	Olpmi (Kor)	255	Ost (Rus)	327
Moorcock	75	Myrmidon	56	Nereide	44	Nottoway (U.S.)	452	Omei (C)	163	Ostergotland (Sw)	349
Moordale	75	Myrmidon (U.S.)	446	Nereo (I)	250	Novorossiisk (Rus)	303	Ommen (N)	268	Ostergaard (U.S.)	421
Moore (U.S.)	419	Myrtle (U.S.)	458	Nereus (U.S.)	444	Noxubse (U.S.)	450	Omosund (Da)	175	Osterveni (Rus)	309
Mooreess	75	Mystic	56	Nerissa	56	Nucleus (Rus)	321	Ona (A)	130	Ostrogghni (Rus)	309
Moorfield	75	Mytho (F)	212	Nervion (Sp)	342	Nueces (U.S.)	451	Onaran (T)	368	Ostroglassy (Rus)	309
Moorfire	75			Neshoba (U.S.)	436	Nueva Ecija (Phil)	285	Onbevreesd (N)	268	Ostrich (U.S.)	433
Moorfly	75			Nespelen (U.S.)	450	Nueva Esparta (Ven)	461	Ondee (F)	220	Oswald (U.S.)	421
Moorgate	75			Ness	46	Numitor (U.S.)	446	Onega (U.S.)	328	Otaka-Maru (J)	254
Moorfowl	75			Nettuno (I)	458	Nunton	292	Oneida (U.S.)	436	Otelchini (Rus)	309
Moorgrass	75			Neuendorf (U.S.)	418	Nusret (T)	367	Onon Daga (U.S.)	455	Otchetli (Rus)	309
Moorgrieve	75			Neunzer (U.S.)	419	Nuthatch (U.S.)	432	Onslow (U.S.)	444	Otori (J)	254
Moehren	75			Neva (Rus)	329	Nutmeg (U.S.)	451	Ontano (I)	248	Otra (Nor)	276
Moorhill	75			New (U.S.)	407	Nyeman (Rus)	328	Ontario (R.C.N.)	94	Otsvestsvenni (Rus)	309
Moorland	75			New Glasgow (R.C.N.)	97			Onvervaard (N)	268	Ottawa (R.C.N.)	98
Moormyrtle	75			New Jersey (U.S.)	388			Onverdroten (N)	268	Otter (U.S.)	418
Moorpout	75			New Kent (U.S.)	436			Onvermoeid (N)	268	Otterstetter (U.S.)	420
Moorside	75			New Liskeard (R.C.N.)	98			Onversagd (N)	268	Otvashni (Rus)	309
Moorsman	75			New Orleans (U.S.)	399			Onverschrokken (N)	268	Oulton	57
Moose (R.C.M.)	100			New Waterford (R.C.N.)	97			Ooerschelde (N)	268	Outremont (R.C.N.)	97
Moqueose (F)	208			Newcastle	28			Oopertune	37	Overijssel (N)	263
Moray (U.S.)	424			Newell (U.S.)	419			Oopportunity (U.S.)	452	Owasco (U.S.)	454
Mordogan (T)	367			Newfoundland	21			Oppoosum	44	Owen	66
Morecambe Bay	42			Newman (U.S.)	429			Opponent (U.S.)	432	Owen (U.S.)	412
Moreno (A)	122			Newman K. Perry (U.S.)	409			Opportunity (U.S.)	452	Oxford Castle	50
Moreno (U.S.)	452			Newport News (U.S.)	395			Oquendo (Sp)	338	Oyster Bay (U.S.)	444
Moroz (Rus)	332			Nezamoshnik (Rus)	312			Oracle (U.S.)	432	Ozark (U.S.)	438
Morpeth Castle	50			Nhong Sarhai (Th)	360			Orca (U.S.)	444	Ozburn (U.S.)	408
Morris (U.S.)	456			Niblack (U.S.)	414			Orcadia	56	Ozura (J)	254
Mors (Po)	239			Nicholas (U.S.)	413			Orchidea (I)	248		
Moskva (Rus)	326			Nicola Fabrizzi (I)	248			Ordronaux (U.S.)	414		
Mosley (U.S.)	419			Niedoscigly (Po)	289			Ordzhonikidze (Rus)	305		
Mosopelea (U.S.)	452			Niels (U.S.)	414			Oregon City (U.S.)	396		
Motive (U.S.)	432			Niels Ebbsen (Da)	172			O'Reilly (U.S.)	419		
Mount Baker (U.S.)	445			Nieuchwytyn (Po)	289			Orella (Chil)	148		
Mount Katmai (U.S.)	445			Niger	56			Orestes	56		
Mount McKinley (U.S.)	435			Nigeria (In)	104			Orient (Cu)	169		
Mount Olympus (U.S.)	435			Nightingale	80			Origny (F)	212		
Mountain Province (Phil)	286			Nightingale (U.S.)	433			Orinami (J)	254		
Mountrail (U.S.)	436			Niizuki (J)	254			Oriole (R.C.N.)	102		
Mounts Bay	42			Nike (U.S.)	456			Oriole (U.S.)	433		
Mousquet (F)	214			Niki (Gr)	226			Orion (F)	213		
Muavent (T)	365			Nimble	81			Orion (Gr)	230		
Mughetto (I)	248			Nimble (U.S.)	432			Orion (U.S.)	444		
Muguet (F)	213			Niobrara (U.S.)	449			Orione (I)	246		
Muir (U.S.)	421			Nipigon (R.C.N.)	99			Oristano (I)	251		
Muir Woods (U.S.)	449			Nipmuc (U.S.)	452			Orkaan (N)	270		
Mulberry (U.S.)	451			Niri (J)	252			O'Flaherty (U.S.)	276		
Mulphen (U.S.)	437			Nissiros (Gr)	229			Oglethorpe (U.S.)	437		
Mull of Galloway	71			Nizam	36			O'Hare (U.S.)	409		
Mull of Kintyre	71			Noa (U.S.)	408			O'Higgins (Chil)	147		
Mullany (U.S.)	412			Noble	36			Ohi Maru (J)	254		
Munda (U.S.)	386			Noble (U.S.)	436			Ohisagi (J)	254		
Munin (Sw)	350			Noce (I)	248			Ohtaka (J)	254		
Munsee (U.S.)	452			Nodoway (U.S.)	450			Ohyado (J)	253		
Murachidori (J)	254			Nogah (Ia)	237			Oiapoque (Br)	139		
Murat Reis (T)	365			Nogiko (J)	252			Oise (F)	212		
Murature (A)	127			Noord Brabant (N)	263			Ojibway (U.S.)	458		
Murchison (R.A.N.)	87			Nootka (R.C.N.)	95			Okaloosa (U.S.)	436		
Murmansk (Rus)	323			Nordenfelt	80			Okanogan (U.S.)	436		
Muroto (J)	253			Nordenskjold (Sw)	350			Okean (Rus)	327		
Murphy (U.S.)	414			Nordkapp (Nor)	277			Okhotsk (Rus) (2 ships)	323		
Murray	41			Nordkyn (Nor)	275			Oki (J)	253		
Murray (U.S.)	413			Nordwind (G)	223			Okiahoma City (U.S.)	402		
Murrelet (U.S.)	432			Norfolk (U.S.)	405			Okushiri (J)	253		
Murtaja (Fin)	191			Norge (Nor)	277			Oktyabrskaia Revolutsia (Rus)	304		
Muskallunge (U.S.)	425			Norman	36			Olaya (P)	284		
Muskingum (U.S.)	448			Norman Scott (U.S.)	411			Oland (Sw)	349		
Musketeer	36			Norris (U.S.)	406			Oleander (U.S.)	458		
Musvaagen (Da)	175			Norrköping (Sw)	349			Oleandri (I)	248		
Mutin (F)	220			North Carolina (U.S.)	390			Oliver Mitchell (U.S.)	417		
Mutine	56			Northampton (U.S.)	394						
Mvita	80			Northwind (U.S.)	456						

P—continued	PER—PIR	Page	PIR—POR	Page	POR—PRI	Page	PRI—QUE	Page	QUI—REC	Page
PAR—PER	Perouse (F)	209	Piranha (Br)	138	Port Hope (R.C.N.)	99	Private William H. Thomas (U.S.)	442	Quiberon (R.A.N.)	87
Paravan (Rus)	Perry (U.S.)	408	Piranha (U.S.)	424	Portage (R.C.N.)	98	Prochni (Rus)	311	Quick (U.S.)	415
Parche (U.S.)	Perseus	20	Pirapia (Br)	138	Portaria (Gr)	229	Procyon (F)	213	Quickmarch (R.A.N.)	87
Pargo (U.S.)	Perseus (Gr)	230	Piraque (Br)	138	Portchester Castle	50	Procyon (Sp)	343	Quillback (U.S.)	423
Paricutin (U.S.)	Perseus (SW)	352	Pirauna (Br)	138	Porte Dauphine (R.C.N.)	101	Prometeo (I)	230	Quincy (U.S.)	397
Parinas (P)	Perseus (U.S.)	456	Pirunus (Rus)	320	Porte de la Reine (R.C.N.)	101	Prometheus (Gr)	230	Quinte (R.C.N.)	100
Parker (A)	Perseverante (F)	218	Piru (Ind)	235	Port Quebec (R.C.N.)	101	Prong (Th)	361	Quirinus (U.S.)	446
Parker (U.S.)	Persicant (U.S.)	432	Piscataqua (U.S.)	450	Port Saint Jean (R.C.N.)	101	Pronzitelny (Rus)	315		
Parkes (R.A.N.)	Persistante (F)	218	Pittington	57	Porte Saint-Louis (R.C.N.)	101	Proserpine (U.S.)	446		
Parks (U.S.)	Pertulante (F)	218	Pittsburgh (U.S.)	397	Porter (U.S.)	411	Prosperous	81		
Parkville (R.C.N.)	Pervenche (F)	213	Pivoine (F)	213	Porterfield (U.S.)	411	Protea (S.A.)	119		
Parle (U.S.)	Peshawar (R.P.N.)	115	Pivot (U.S.)	432	Portillo (P)	234	Protector	55		
Parnaiba (Br)	Petard	38	Pizarro (Sp)	359	Portland (U.S.)	398	Proteo (I)	251	Raagen (Da)	175
Parrot (U.S.)	Peter Gedda (Sw)	355	Plai Chumpol (Th)	359	Porto Empedocle (I)	251	Proteus (U.S.)	444	Rabaul (U.S.)	385
Partizan (Rus)	Petersham	58	Plaice (U.S.)	424	Porto Fossone (I)	251	Proton (U.S.)	447	Rabotchi (Rus)	326
Pasadena (U.S.)	Peterson (U.S.)	419	Plamya (Rus)	322	Porto Pisano (I)	251	Proud Fusilier	62	Raby (U.S.)	418
Pasig (U.S.)	Peto (U.S.)	425	Planet	75	Porto Quieto (I)	251	Proud Grenadier	62	Raccoon (R.C.N.)	100
Passaconway (U.S.)	Petra (Th)	361	Planetree (U.S.)	457	Porto Recanati (I)	251	Proud Guardsman	62	Rachgoun (F)	220
Passaic (U.S.)	Petrel (U.S.)	451	Plantagenet	75	Porto Torres (I)	251	Proud Highlander	62	Rachid (Eg)	133
Passat (G)	Petrobus	80	Plata (A)	126	Portsmouth (U.S.)	402	Proud Knight	62	Radford (U.S.)	413
Passumpsic (U.S.)	Petrof Bay (U.S.)	386	Platano (I)	248	Portunus (U.S.)	446	Proud Lancer	62	Radjawal (Ind)	233
Passnil (Rus)	Pettit (U.S.)	419	Platte (U.S.)	449	Poryvisti (Rus)	315	Proud Legionary	62	Rafah (Eg)	184
Passo da Patria (Br)	Petunia (F)	214	Platypus (R.A.N.)	89	Poseidon (Gr)	230	Proud Patriot	62	Rail (U.S.)	433
Pataia (A)	Pevensey Castle	50	Pledge (U.S.)	432	Poseidon (U.S.)	446	Proud Patroller	62	Raimondo Montecuccoli (I)	243
Patapso (U.S.)	Phai (Th)	361	Plehmindorf (Po)	289	Potawatomi (U.S.)	452	Providence	56	Rainer (U.S.)	445
Pati Unus (Ind)	Phali (Th)	360	Plejad (SW)	352	Potengi (Br)	140	Providence (U.S.)	402	Raiput (In)	107
Paciente (F)	Phaon (U.S.)	446	Ploiarkhos Meletopoulos (Gr)	229	Potosi (Mex)	257	Provodnik (Rus)	322	Rajputana (In)	107
Patmos (Gr)	Pheasant	44	Ploppo (I)	248	Power (U.S.)	408	Provorni (Rus)	309	Rame Head	71
Patria (Cu)	Pheasant (U.S.)	413	Plotarkhis Aslanoglou (Gr)	229	Pra Ruang (Th)	357	Prozorlivi (Rus)	315	Rambler (U.S.)	457
Patria (Ven)	Philip (U.S.)	432	Plotarkhis Blessas (Gr)	229	Prairie (U.S.)	445	Prowess (U.S.)	432	Rampart (Rus)	321
Patricia (Dom)	Philippine Sea (U.S.)	381	Plotarkhis Chatziconstantis (Gr)	229	Praktika (Rus)	328	Ptarmigan (U.S.)	432	Ramsden (U.S.)	419
Patricia (Sw)	Philol	79	Plover	67	Prap (Th)	361	Pu To (C)	163	Ramskär (Sw)	353
Patron (Rus)	Phoebe	25	Plover (U.S.)	433	Prasae (Th)	357	Puddefjord (G)	123	Ran (I)	252
Pattani (Th)	Phoebe (U.S.)	433	Pluck (U.S.)	432	Pratt (U.S.)	417	Pueyrredon (A)	125	Ran (Sw)	355
Paul G. Baker (U.S.)	Phosamton (Th)	359	Plucky	56	Prenzlau (G)	221	Puffer (U.S.)	425	Rana (In)	105
Paul Goffeny (F)	Pickaway (U.S.)	436	Plunger (U.S.)	428	Preserver (U.S.)	452	Puget Sound (U.S.)	385	Rana (Nor)	276
Paul Hamilton (U.S.)	Pickel (U.S.)	423	Plunkett (U.S.)	414	President Adams (U.S.)	436	Rancagua (Chil)	151	Rance (F)	218
Paulo Afonso (Br)	Picking (U.S.)	411	Pluto	56	President Hayes (U.S.)	436	Randall (U.S.)	436	Ranger (U.S.)	378
Pavlic (U.S.)	Pickle	56	Pluton (Sp)	438	President Jackson (U.S.)	436	Randolph (U.S.)	380	Ranjet (In)	105
Pavot (F)	Picton	57	Plymouth Rock (U.S.)	214	Presidente Alfaro (Ec)	183	Ranger (U.S.)	378	Rankin (U.S.)	437
Pawcatuck (U.S.)	Pictor (U.S.)	447	Pnom-Penh (F)	251	Presidente Erazuriz (Chil)	166	Ransom (U.S.)	432	Ranpura	69
Pawnee (U.S.)	Picuda (U.S.)	424	Po (I)	432	Presidente Mosquera (Col)	178	Rapier (F)	218	Rapine (F)	218
Paxi (Gr)	Piedmont (U.S.)	445	Pochard (U.S.)	434	Presidente Poynado (Dom)	178	Rapier (F)	218	Rapine (F)	218
Paysandu (Ur)	Piedrabuena (A)	126	Pocomok (U.S.)	434	Presidente Pinto (Chil)	151	Rapier (F)	218	Rapine (F)	218
Paysherd (Rus)	Piet Hein (N)	263	Pocono (U.S.)	435	Presidente Sarmiento (A)	128	Rapier (F)	218	Rapine (F)	218
Peacock	Pieter Florisz (N)	269	Podsekate (Rus)	322	Presidente Troncoso (Dom)	178	Rapier (F)	218	Rapine (F)	218
Peacock (U.S.)	Pietermaritzburg (S.A.)	118	Podviziaini (Rus)	315	Presidente Trujillo (Dom)	178	Rapier (F)	218	Rapine (F)	218
Pearl Bank (Phil)	Pigeon (U.S.)	432	Pogy (U.S.)	425	Presley (U.S.)	417	Rapier (F)	218	Rapine (F)	218
Peconic (U.S.)	Pike (U.S.)	151	Poinciana (U.S.)	458	Presque Isle (U.S.)	451	Rapier (F)	218	Rapine (F)	218
Pecos (U.S.)	Picomayo (Chil)	428	Point Cruz (U.S.)	385	Prestige (U.S.)	432	Rapier (F)	218	Rapine (F)	218
Pedro Nunes (Port)	Pillsbury (U.S.)	420	Point Defiance (U.S.)	438	Prestol	79	Rapier (F)	218	Rapine (F)	218
Pedro Sainz de Baranda (Mex)	Pilot (Ru)	320	Polarfront I (Nor)	275	Preston (U.S.)	411	Rapier (F)	218	Rapine (F)	218
Pegaso (Sp)	Pilot (U.S.)	431	Polarfront II (Nor)	275	Prestonian (R.C.N.)	97	Rapier (F)	218	Rapine (F)	218
Pehuenche (A)	Piloto Sibbald (Chil)	151	Polaris	56	Prevail (U.S.)	444	Rapier (F)	218	Rapine (F)	218
Peiffer (U.S.)	Pilston	57	Polaris (SW)	352	Price (U.S.)	419	Rapier (F)	218	Rapine (F)	218
Pelandok	Pimpernelle (F)	214	Polaris (U.S.)	447	Prichett (U.S.)	412	Rapier (F)	218	Rapine (F)	218
Pelias (U.S.)	Pinar Del Rio (Cu)	169	Polcevera (Rus)	330	Pride (U.S.)	419	Rapier (F)	218	Rapine (F)	218
Pelican	Pincher	56	Polemistis (Gr)	228	Prime (U.S.)	432	Rapier (F)	218	Rapine (F)	218
Pelican (U.S.)	Pindos (Gr)	227	Pollington	57	Primevere (F)	214	Rapier (F)	218	Rapine (F)	218
Pelikan (N)	Pine Island (U.S.)	434	Pollux (F)	213	Primorie (Rus)	329	Rapier (F)	218	Rapine (F)	218
Pellew	Pine Lake (Rus)	322	Pollux (SW)	352	Primrose (U.S.)	457	Rapier (F)	218	Rapine (F)	218
Pellicano (I)	Pineham	58	Pollux (U.S.)	447	Primula (I)	248	Rapier (F)	218	Rapine (F)	218
Peliworm (G)	Pinos (Gr)	230	Polyarni (Rus) (2 Ships)	327	Primvorni (Rus)	310	Rapier (F)	218	Rapine (F)	218
Pembina (U.S.)	Pinnacle (U.S.)	432	Pomfret (U.S.)	424	Prince Salvor	74	Rapier (F)	218	Rapine (F)	218
Penetang (R.C.N.)	Pinnabog (U.S.)	450	Pomodori (U.S.)	423	Prince William (U.S.)	387	Rapier (F)	218	Rapine (F)	218
Penetrate (Rus)	Pino (I)	243	Pomona (I)	247	Princesa (Sp)	341	Rapier (F)	218	Rapine (F)	218
Penguin (U.S.)	Pinola (U.S.)	452	Pompon (U.S.)	426	Princeton (U.S.)	381	Rapier (F)	218	Rapine (F)	218
Penobscot (U.S.)	Pintado (U.S.)	424	Ponchatoula (U.S.)	449	Prins Carl (Sw)	352	Rapier (F)	218	Rapine (F)	218
Pentheus (U.S.)	Pinto (U.S.)	452	Ponta Delgada (Port)	296	Private Elden H. Johnson (U.S.)	442	Rapier (F)	218	Rapine (F)	218
Penton	Pioneer (U.S.)	432	Pontchartrain (U.S.)	454	Private Francis A. McGraw (U.S.)	448	Rapier (F)	218	Rapine (F)	218
Penyu	Pioneer (Rus)	322	Poole (U.S.)	419	Private Frank J. Petrarca (U.S.)	448	Rapier (F)	218	Rapine (F)	218
Perce-Neige (F)	Pioneer Valley (U.S.)	449	Pope (U.S.)	419	Private Joe E. Mann (U.S.)	448	Rapier (F)	218	Rapine (F)	218
Perch (U.S.)	Pipefish (U.S.)	424	Poplar (U.S.)	458	Private John F. Thorson (U.S.)	448	Rapier (F)	218	Rapine (F)	218
Peregrine (U.S.)	Piper (U.S.)	424	Poplar Lake (Rus)	322	Private John R. Towle (U.S.)	448	Rapier (F)	218	Rapine (F)	218
Peril (Rus)	Pipinos (Gr)	228	Porashayushchi	315	Private Jose F. Valdez (U.S.)	448	Rapier (F)	218	Rapine (F)	218
Perkins (U.S.)	Pique (F)	214	Porkkala (Fin)	191	Private Joseph F. Merrell (U.S.)	448	Rapier (F)	218	Rapine (F)	218
Permit (U.S.)	Piraju (Br)	138	Porlock Bay	42	Private Leonard C. Brostrom (U.S.)	448	Rapier (F)	218	Rapine (F)	218
	Pirambu (Bu)	138	Porpoise (U.S.)	428			Rapier (F)	218	Rapine (F)	218



## GENERAL INDEX—continued.

## RECRUIT (U.S.)—SERDI (Rus)

R—continued		RIG—RON		RON—SAG		SAG—SAN		SAN—SAY		SBO—SER	
REC—RIF	Page	Rigel (F) ...	Page	Ronquil (U.S.) ...	Page	Sagitta (U.S.) ...	Page	San Diego (U.S.) ...	Page	Sbörul (Ro) ...	Page
Recruit (U.S.) ...	432	Rigel (SW) ...	352	Rooks (U.S.) ...	411	Saggittaire (F) ...	213	San Francisco (U.S.) ...	399	Scabbardfish (U.S.) ...	424
Red Deer (R.C.N.) ...	99	Rio (Br) ...	140	Roompot (N) ...	269	Sagittario (I) ...	246	San Giorgio (I) ...	243	Scarba (R.N.Z.N.) ...	111
Redbud (U.S.) ...	448	Ria (Bul) ...	141	Rosa (Dom) ...	181	Sagres (Port) ...	296	San Jacinto (U.S.) ...	384	Scarborough ...	41
Redfin (U.S.) ...	426	Riley (U.S.) ...	416	Rosalind ...	65	Sagu (Bur) ...	143	San Juan (A) ...	125	Schelde (Bel) ...	133
Redfish (U.S.) ...	424	Rimac (P) ...	283	Rosario (A) ...	123	Saguénay (R.C.N.) ...	98	San Juan (U.S.) ...	404	Schiermonnikoog (N) ...	269
Redhead (U.S.) ...	433	Rimu (R.N.Z.N.) ...	111	Roselle (U.S.) ...	432	Sahel (F) ...	220	San Julian (A) ...	129	Schmitt (U.S.) ...	429
Rednour (U.S.) ...	429	Rinaldo ...	56	Roselys (F) ...	213	Saidor (U.S.) ...	385	San Luis (A) ...	125	Schouwen (N) ...	269
Redpole ...	47	Rincon (U.S.) ...	450	Rosewood (U.S.) ...	451	Sailfish (U.S.) ...	422	San Marco (I) ...	243	Schroeder (U.S.) ...	412
Redpole (U.S.) ...	433	Rindjani (Ind) ...	235	Rosolino Pilo (I) ...	248	St. Austell Bay ...	42	San Marcos (U.S.) ...	438	Schulpengat (N) ...	269
Redshank ...	68	Ring (Sw) ...	355	Ross (U.S.) ...	110	St. Bride's Bay ...	42	San Martin (P) ...	283	Schuykill (U.S.) ...	449
Redstart (U.S.) ...	432	Ringgold (U.S.) ...	412	Rotoiti (R.N.Z.N.) ...	412	St. Catherine's (R.C.N.) ...	97	San Pablo (U.S.) ...	443	Scimitarra (I) ...	247
Redwing ...	80	Ringness (U.S.) ...	429	Rotterdam (N) ...	263	St. Croix (R.C.N.) ...	98	San Rafael (Dom) ...	182	Sciota (U.S.) ...	452
Redwing (U.S.) ...	433	Rinkenaes (Da) ...	175	Rowan (U.S.) ...	408	St. George (U.S.) ...	434	San Saba (U.S.) ...	436	Scorcher ...	54
Redwood (U.S.) ...	451	Rio Blanco (Br) ...	258	Rowan ...	78	St. James ...	33	Sanavaron (A) ...	130	Scorpion ...	31
Reedbird (U.S.) ...	433	Rio Grande (U.S.) ...	139	Rowe (U.S.) ...	412	St. Kitts ...	33	Sanborn (U.S.) ...	436	Scorpion (F) ...	218
Reeves (U.S.) ...	429	Rio Negro (Ur) ...	450	Rowena ...	56	St. Laurent (R.C.N.) ...	98	Sanchez Barcaiztegui (Sp) ...	339	Scoter (U.S.) ...	432
Reggio ...	72	Rioja (A) ...	126	Roy O. Hale (U.S.) ...	419	St. Lykoudis (Gr) ...	230	Sancho Jimeno (Col) ...	166	Scotsman ...	54
Register (U.S.) ...	429	Rios (P) ...	284	Royalist ...	24	St. Margarets ...	74	Sanctuary (U.S.) ...	443	Scott ...	67
Regulus (F) ...	213	Riplingham ...	58	Roysterer ...	81	St. Nazaire ...	72	Sanda (R.N.Z.N.) ...	111	Scott (U.S.) ...	418
Regulus (Sw) ...	352	Ripon ...	76	Rozenburg (N) ...	268	St. Paul (U.S.) ...	397	Sandalwood (U.S.) ...	451	Scout (U.S.) ...	432
Regulus (U.S.) ...	447	Rippledye ...	80	Rubin (Rus) ...	320	St. Stephen (R.C.N.) ...	97	Sanderling (U.S.) ...	433	Scribner (U.S.) ...	429
Rehoboth (U.S.) ...	443	Ruchamkin (U.S.) ...	148	Ruchamkin (U.S.) ...	429	St. Therese (R.C.N.) ...	97	Sandlance ...	424	Scrimmage (U.S.) ...	432
Reiburn (I) ...	253	Ruchamkin (U.S.) ...	253	Rudderow (U.S.) ...	416	Saintes ...	33	Sandön (Sw) ...	353	Scroggins (U.S.) ...	418
Reign (U.S.) ...	432	Rishiri (I) ...	122	Ruddy (U.S.) ...	432	Saipan (U.S.) ...	385	Sandoval (U.S.) ...	436	Scuffle (U.S.) ...	432
Reindeer (R.C.N.) ...	100	Rivadavia (A) ...	432	Ruden (G) ...	223	Sakalave (F) ...	207	Sandpiper (R.C.N.) ...	100	Scurry (U.S.) ...	432
Reindeer (U.S.) ...	452	Rival (U.S.) ...	102	Rudyerd Bay (U.S.) ...	386	Sakarya (T) ...	366	Sandpiper (U.S.) ...	433	Scythian ...	54
Reinoyund (Nor) ...	277	Riverton (R.C.N.) ...	417	Ruff (U.S.) ...	433	Saker El-Bahar (Eg) ...	188	Sandray ...	65	Sea Devil ...	54
Rekordni (Rus) ...	309	Rizzi (U.S.) ...	400	Rummel (F) ...	220	Sal (Port) ...	294	Sangay (U.S.) ...	445	Sea Giant ...	81
Relampago (Sp) ...	333	Roanoke (U.S.) ...	406	Russell ...	436	Salamonia (Gr) ...	229	Sangpakong (Th) ...	357	Sea Leopard (U.S.) ...	423
Relentless ...	40	Robert A. Owens (U.S.) ...	406	Rutland (U.S.) ...	310	Salamonie (U.S.) ...	449	Sanguine ...	54	Sea Owl (U.S.) ...	424
Remey (U.S.) ...	411	Robert Brazier (U.S.) ...	417	Ryan (Rus) ...	299	Saldiray (T) ...	366	Sans Souci (Haiti) ...	231	Sea Poacher (U.S.) ...	424
Remora (U.S.) ...	423	Robert Dundas ...	81	Rybinsk (Po) ...	310	Salem (U.S.) ...	395	Santa Cruz (A) ...	125	Sea Robin (U.S.) ...	424
Remus (Sw) ...	350	Robert E. Peary (U.S.) ...	419	Rydeki (Rus) ...	310	Salerno ...	72	Santa Cruz (Port) ...	296	Sea Salvor ...	73
Renate (U.S.) ...	448	Robert F. Keller (U.S.) ...	417	Ryeshitelni (Rus) ...	310	Salerno Bay (U.S.) ...	385	Santa Fé (A) ...	112	Sea Scout ...	54
Rendlesham ...	58	Robert H. McCard (U.S.) ...	408	Rushmore (U.S.) ...	438	Salice (I) ...	248	Santa Fe (U.S.) ...	402	Sea Wolf (U.S.) ...	422
Rendova (U.S.) ...	385	Robert H. Smith (U.S.) ...	415	Russell ...	41	Salinay (U.S.) ...	452	Santa Maria (Port) ...	295	Seabear ...	56
Reno (U.S.) ...	404	Robert I. Paine (U.S.) ...	420	Rutland (U.S.) ...	436	Salisbury (U.S.) ...	434	Santa Marta (Col) ...	166	Seacat (U.S.) ...	424
Renoncule (R) ...	213	Robert K. Huntington (U.S.) ...	410	Rutland (U.S.) ...	436	Salisbury Sound (U.S.) ...	434	Santee (U.S.) ...	387	Seadevil (U.S.) ...	424
Renshaw (U.S.) ...	413	Robert L. Wilson (U.S.) ...	407	Ryan (Rus) ...	299	Salish (U.S.) ...	452	Santiago del Estero (A) ...	127	Seadog (U.S.) ...	424
Renville (U.S.) ...	436	Robert M. Middleton ...	81	Rybinsk (Po) ...	310	Salmon (U.S.) ...	422	Sapfir (Rus) ...	320	Seafox ...	76
Report (U.S.) ...	432	Roberts ...	21	Rydeki (Rus) ...	310	Salto (Ur) ...	459	Saphir (F) ...	210	Seafox (U.S.) ...	424
Repose (U.S.) ...	443	Roberts (U.S.) ...	421	Ryeshitelni (Rus) ...	310	Salt (U.S.) ...	432	Sappa Creek (U.S.) ...	449	Seagull ...	67
Republica (A) ...	127	Robin (U.S.) ...	433	Rushmore (U.S.) ...	438	Salute (U.S.) ...	432	Saranac (U.S.) ...	449	Seagull (U.S.) ...	433
Requin (F) ...	210	Robinson (A) ...	128	Russell ...	41	Salvador Correia (Port) ...	295	Sarandi (A) ...	127	Seahorse (U.S.) ...	424
Requin (U.S.) ...	426	Robinson (U.S.) ...	412	Rutland (U.S.) ...	436	Salvage Duke ...	74	Sarasin (Th) ...	360	Seal (U.S.) ...	428
Requinul (Ro) ...	298	Robusto (I) ...	251	Ryan (Rus) ...	299	Salvager (U.S.) ...	452	Sarasota (U.S.) ...	436	Sealion (U.S.) ...	428
Requisite (U.S.) ...	444	Roc ...	76	Rybinsk (Po) ...	310	Salvalour ...	74	Saratoga (U.S.) ...	378	Seaman (U.S.) ...	408
Reseda (F) ...	213	Rochester (U.S.) ...	396	Rym (Rus) ...	320	Salveda ...	74	Sarda (U.S.) ...	423	Seaver (A) ...	128
Reserve (R.A.N.) ...	90	Rock (U.S.) ...	426	Rys (Po) ...	288	Salvestor ...	74	Sarepta ...	73	Sebago (U.S.) ...	454
Resolute (R.C.N.) ...	100	Rockaway (U.S.) ...	454	Ryver (U.S.) ...	448	Salvia (U.S.) ...	457	Sargent Bay (U.S.) ...	386	Sebec (U.S.) ...	449
Respond ...	81	Rockbridge (U.S.) ...	436			Salvictor ...	74	Sarmiento de Gamboa (Sp) ...	340	Sechura (P) ...	284
Restauration (Dom) ...	180	Rocket ...	40			Salvigil ...	74	Sarnia (R.C.N.) ...	99	Sedge (U.S.) ...	457
Restigouche (R.C.N.) ...	98	Rockhampton (R.A.N.) ...	89			Salviola ...	74	Sarpedon (U.S.) ...	446	Seer (U.S.) ...	432
Restive ...	81	Rockingham (U.S.) ...	436			Salvora (Sp) ...	343	Sarpen (Nor) ...	277	Sefidraude (Per) ...	279
Retort ...	81	Rockliffe (R.C.N.) ...	98			Salvora (I) ...	251	Sarsfield (U.S.) ...	407	Sefton ...	57
Reuben James (U.S.) ...	420	Rockwall (U.S.) ...	436			Sam Bras (Port) ...	296	Sassafras (U.S.) ...	457	Segugio (I) ...	249
Revelstoke (R.C.N.) ...	100	Rocky Mount (U.S.) ...	435			Sam Gak Sang (Kor) ...	255	Satakut (Th) ...	361	Segundo (U.S.) ...	424
Revenge (U.S.) ...	432	Roddington ...	57			Sammaesan (Th) ...	361	Satterlee (U.S.) ...	414	Segura (Sp) ...	342
Reward ...	81	Rodman (U.S.) ...	415			Samana (Dom) ...	180	Satyr (U.S.) ...	446	Seinda (Bur) ...	143
Rhea (U.S.) ...	433	Rodriguez (P) ...	281			Samar (Phil) ...	285	Saucy ...	81	Sekirei (I) ...	254
Rhenen (N) ...	268	Roebuck ...	40			Samar (U.S.) ...	446	Saula (Nor) ...	276	Sel (Nor) ...	276
Rhinoceros (F) ...	220	Roermond (N) ...	268			Samba (A) ...	128	Saufley (U.S.) ...	413	Selendon (P) ...	284
Rhodes (U.S.) ...	419	Roger de Lauria (Sp) ...	338			Sambre (Bel) ...	133	Saugatuck (U.S.) ...	449	Selene ...	54
Rhododendron (U.S.) ...	458	Rogers (U.S.) ...	409			Samed (Th) ...	361	Saugus (U.S.) ...	438	Sellstrom (U.S.) ...	419
Ribble ...	46	Rogers Blood (U.S.) ...	429			Samos (Gr) ...	230	Sault Ste. Marie (R.C.N.) ...	98	Seminole (U.S.) ...	437
Rich (U.S.) ...	407	Rohilkhand (In) ...	107			Samoset (U.S.) ...	452	Sava (Yu) (2 Ships) ...	465	Semois (Bel) ...	133
Richard B. Anderson (U.S.) ...	408	Roland Morillot (F) ...	211			Sampo (Fin) ...	191	Sava (Yu) ...	467	Seneca (U.S.) ...	452
Richard E. Kraus (U.S.) ...	408	Rollette (U.S.) ...	437			Samson ...	81	Savannah (Haiti) ...	35	Sénégalais (F) ...	207
Richard M. Rowell (U.S.) ...	417	Rolf (U.S.) ...	417			Samson (F) ...	220	Savannah (U.S.) ...	403	Seneschal ...	54
Richard P. Leary (U.S.) ...	411	Rolf Krake (Da) ...	172			Samson (Gr) ...	230	Savarona (T) ...	367	Senja (Nor) ...	277
Richard S. Bull (U.S.) ...	417	Rollicher ...	81			Samsonia ...	81	Savo Island (U.S.) ...	386	Sennet (U.S.) ...	424
Richard W. Suesens (U.S.) ...	417	Rombach (U.S.) ...	417			Samudera (Ind) ...	234	Savorgnan de Brazza (F) ...	205	Sentinel ...	54
Richelieu (F) ...	199	Romola ...	56			Samuel B. Roberts (U.S.) ...	408	Sawfish (U.S.) ...	425	Sentinel (U.S.) ...	433
Richey (U.S.) ...	419	Romulus (Sw) ...	350			Samuel Chase (U.S.) ...	436	Sayochidori (I) ...	254	Sentry (U.S.) ...	432
Ricketts (U.S.) ...	419	Romulus (U.S.) ...	446			Samuel L. Moore (U.S.) ...	410			Sequoia (Phil) ...	286
Rifleman ...	56	Ronay ...	65			Samui (Th) ...	361			Serbol ...	79
		Roncador (U.S.) ...	424			San Carlos (U.S.) ...	444			Serdi (Rus) ...	309

S—continued		SHO—SLE		SLI—SPE		SPE—STO		STO—SVE		SVI—TAM	
SER—SHO	Page	Shoveler (U.S.)	Page	Slinger	Page	Spencer (U.S.)	Page	Storoshevoi (Rus)	Page	Svirepi (Rus)	Page
Serene	56	Shpill (Rus)	432	Sloat (U.S.)	419	Sperry (U.S.)	444	Stortemelk (N)	269	Svobodni (Rus)	310
Serene (U.S.)	432	Shrike (U.S.)	433	Sluys	33	Sphinx	446	Strahan (R.A.N.)	89	Swallow (U.S.)	309
Sergeant Andrew Miller (U.S.)	448	Shrivenham	58	Smland (Sw)	349	Spikefish (U.S.)	424	Strashni (Rus)	310	Swallow (U.S.)	433
Sergeant Archer T. Gammon (U.S.)	448	Shchit (Rus)	322	Smalley (U.S.)	412	Spinax (U.S.)	426	Strategy (U.S.)	432	Swan (R.A.N.)	88
Sergeant Charles E. Mower (U.S.)	442	Shstorm (Rus)	320	Smeul (Ro)	297	Spinone (I)	249	Straub (U.S.)	421	Swan (U.S.)	433
Sergeant George D. Keathley (U.S.)	448	Shumshu (Rus)	320	Smertch (Rus)	320	Spiro (A)	129	Straus (U.S.)	417	Swanson (U.S.)	97
Sergeant George Peterson (U.S.)	448	Shwepazun (Bur)	143	Smelivi (Rus)	309	Spokane (U.S.)	404	Strela (Rus)	322	Swanston	414
Sergeant Jack J. Pendleton (U.S.)	448	Schwachida (Bur)	143	Smialy (Po)	289	Spoonbill (U.S.)	433	Stremetelni (Rus)	309	Swasey (U.S.)	57
Sergeant Jonah E. Kelley (U.S.)	448	Sibilla (I)	247	Smilax (U.S.)	457	Spossilni (Rus)	310	Strength (U.S.)	432	Sway (U.S.)	419
Sergeant Joseph E. Muller (U.S.)	448	Sibir (Rus)	329	Smislenni (Rus)	309	Spot (U.S.)	424	Strickland (U.S.)	408	Swe An (C)	432
Sergeant Morris E. Crain (U.S.)	448	Sibirskov (Rus)	331	Smishlyoni (Rus)	309	Sprangaren (Sw)	355	Stricker	72	Sweetbriar (U.S.)	457
Sergeant Truman Kimbo (U.S.)	448	Sibley (U.S.)	436	Smolensk (Rus)	329	Sprawnny (Po)	239	Striker	72	Sweetgum (U.S.)	457
Serieux (F)	223	Siboney (Cu)	168	Smolny (Rus)	329	Sprightly (R.A.N.)	90	Strive (U.S.)	432	Swenning (U.S.)	419
Serifos (Gr)	230	Siboney (U.S.)	385	Smyeli (Rus)	309	Springer (Nor)	276	Strogi (Bul)	141	Swerve (U.S.)	432
Serp (Rus)	315	Sichang (Th)	361	Smyena (Rus)	330	Springer (U.S.)	424	Strogi (Rus)	310	Swift (U.S.)	432
Serpens (U.S.)	448	Sicily (U.S.)	385	Snaphanpen (Sw)	353	Springer (Da)	173	Stroini (Rus)	310	Swift Current (R.C.N.)	99
Serrai (Gr)	230	Sidlesham	58	Snar (Nor)	276	Springfield (U.S.)	402	Stromboli (I)	250	Swiftsure	22
Serrano (Chil)	148	Sierra (U.S.)	445	Snatch (U.S.)	452	Sproston (U.S.)	413	Strong (U.S.)	410	Swin	74
Serrano (U.S.)	452	Sienna (C)	154	Sneck (N)	268	Spruce Lake (Rus)	322	Strymon (Gr)	230	Switha	65
Serviola (Sp)	343	Signal (Rus)	330	Snellius (N)	269	Squirrel	80	Stryno (Da)	176	Sycamore (U.S.)	458
Sesia (I)	251	Signal (U.S.)	75	Snider	80	Staff (U.S.)	432	Sturdy (U.S.)	432	Sydney (R.A.N.)	84
Set Kya (Bur)	143	Sigmet (U.S.)	432	Snipe	44	Staffeta (I)	249	Sturko (Sw)	353	Sylvia	56
Set Yahat (Bur)	143	Sigmet (U.S.)	412	Snogg (Nor)	276	Stafford (U.S.)	417	Sturtevant (U.S.)	419	Symphony (U.S.)	432
Setoise (F)	216	Sigmet (U.S.)	412	Snyder (U.S.)	421	Stalin (Rus) (3 ships)	305, 326, 312	Stutthof (Po)	289	Szybki (Po)	289
Sevastopol (Rus)	304	Sigmet (U.S.)	276	Sobenes (Cnii)	151	Stalingrad (Rus)	307	Strybörn (Sw)	355		
Severn (U.S.)	449	Silni (Rus)	310	Sodermanland (Sw)	349	Stalker	72	Sub Lieut. Valke (Bel)	133		
Seymourputi (Rus)	331	Silversides (U.S.)	425	Soei-Marui (I)	254	Stallion (U.S.)	452	Sublocotenent Ghiculescu (Ro)	299		
Seymour D. Owens (U.S.)	408	Silverstein (U.S.)	417	Soemba (N)	267	Stalwart (U.S.)	432	Success (U.S.)	432		
Sfinge (I)	247	Silverton	49	Sofades (Gr)	230	Stanley (U.S.)	412	Succour	74		
Shackleton	67	Simi (Gr)	229	Söhsten (Da)	175	Stanton (U.S.)	419	Sugi (J)	252	Ta Ching (C)	163
Shad (U.S.)	425	Simon Van Ser Steel (S.A.N.)	117	Söhunden (Da)	175	Staphorst (N)	268	Suisun (U.S.)	444	Ta Cheng (C)	155
Shadbush (U.S.)	458	Sims (U.S.)	429	Sokrushitelni (Rus)	309	Starkodder (Sw)	355	Sukrip (Th)	360	Ta Dindeng (Th)	360
Shadwell (U.S.)	438	Sind (R.P.N.)	114	Soldado Canaves (Chil)	150	Starling	47	Sulham	58	Ta Hung (C)	163
Shakamaxon (U.S.)	451	Singleton	57	Solebay	33	Starling (U.S.)	432	Sullington	57	Ta Ming (C)	163
Shakori (U.S.)	452	Sinmin (Bur)	143	Soley (U.S.)	410	Start Bay	42	Sullivans (U.S.)	412	Ta Yu (C)	163
Shakti (In)	108	Sinyang (C)	359	Sollimoes (Br)	138	Start Bay	42	Sultane (F)	210	Taalac (Phil)	286
Shalford	63	Sjoux (R.C.N.)	152	Söllöven (Da)	175	Stavanger (Nor)	273	Sultanhisar (T)	365	Taarnfalken (Da)	175
Shamrock Bay (U.S.)	386	Sjoux (U.S.)	96	Somali (F)	207	Stavanger (Nor)	273	Sumac (U.S.)	458	Tabard	53
Shamsher (R.P.N.)	115	Sirago (U.S.)	452	Somerset (S.A.)	119	Stawell (R.N.Z.N.)	110	Sumire (J)	252	Tabberer (U.S.)	417
Shangri-La (U.S.)	380	Sirene (F)	210	Somme (F)	212	Steady (U.S.)	432	Sun-Yat-Sen (Rus)	326	Tachin (Th)	357
Shannon (U.S.)	415	Sirio (I)	246	Sonnet	75	Steamer Bay (U.S.)	386	Sunbird (U.S.)	451	Taciturn	53
Sharps (U.S.)	448	Sirius	25	Sonoma (U.S.)	452	Stedham	58	Suncock (U.S.)	451	Taconic (U.S.)	435
Shasta (U.S.)	445	Sirius (F)	213	Soobrazitelni (Rus)	310	Steelhead (U.S.)	425	Sundew (U.S.)	457	Tactician	53, 88
Shavington	57	Sirry (Per)	279	Söridderen (Da)	175	Steenwijk (N)	268	Sundsvall (Sw)	349	Taebaeksan (Kor)	255
Shawnee Trail (U.S.)	449	Siskin (U.S.)	433	Söröy (Nor)	275	Steeppholm	65	Sunfish (U.S.)	425	Taegong (Kor)	255
Shea (U.S.)	415	Sisu (Fin)	191	Sorrel (U.S.)	457	Stegg (Nor)	276	Sunnadin (U.S.)	452	Taegonggang (Kor)	255
Sheffield	28	Sitkoh Bay (U.S.)	386	Sorte Sara (Da)	176	Steinaker (U.S.)	409	Suomen Joutsen (Fin)	191	Taegu (Kor)	255
Sheldrake (U.S.)	444	Sittard (N)	268	Sotavento (Mex)	258	Stembel (U.S.)	412	Superb	22	Taejon (Kor)	255
Shelikof (U.S.)	444	Sivrihisar (T)	367	Sotir (Gr)	230	Stentor (U.S.)	446	Superior (U.S.)	432	Taff	46
Shelter (U.S.)	432	Sjöbjörnen (Sw)	351	Sotoyoma (U.S.)	452	Stephen Makarov (Rus)	332	Superman	81	Tahay	65
Shelton (U.S.)	408	Sjöborren (Sw)	351	Soubarrissen (U.S.)	449	Stephen Potter (U.S.)	412	Surasdra (Th)	358	Tahmadou (Per)	279
Shenandoah (U.S.)	445	Sjöbosten (Sw)	351	Soudanais (F)	207	Sterlet (U.S.)	424	Surcouf (F)	203	Tai An (C)	160
Shenyang (C)	158, 152	Sjöbunden (Sw)	351	Source (F)	220	Stettler (R.C.N.)	97	Surf Patrol	77	Tai Chao (C)	159
Shepparton (R.A.N.)	89	Sjölejonet (Sw)	351	Southdown	49	Stevens (U.S.)	412	Surf Pioneer	77	Tai Ho (C)	159
Sherburne (U.S.)	436	Sjöörmen (Sw)	351	Southernland (U.S.)	409	Stevenson (U.S.)	414	Surfbird (U.S.)	432	Tai Hu (C)	159
Shields (U.S.)	412	Sjud (Rus)	327	Sovershenni (Rus)	309	Stevenson (U.S.)	414	Surfing (U.S.)	361	Tai Kang (C)	159
Shiga (J)	253	Skaden (Da)	175	Soya (J)	254	Stewart (U.S.)	419	Suriya (Th)	286	Tai Ping (C)	159
Shigi (J)	253	Skagit (U.S.)	437	Spa	81	Stickell (U.S.)	409	Surigao (Phil)	286	Tai Sangt (C)	159
Shii (Rus)	313	Skarv (Nor)	276	Spaback	81	Stickleback (U.S.)	424	Surprise	47	Tai Yuan (C)	152
Shika (Rus)	322	Skarven (Da)	176	Spabrook	81	Stige (Rus)	330	Sursay	65	Taifun (Ro)	299
Shikine (J)	253	Skeena (R.C.N.)	98	Spaburn	81	Stignas (Da)	175	Susquehanna (U.S.)	450	Taifun (Rus)	320
Shillay	65	Skill (U.S.)	432	Spadefish (U.S.)	424	Stockdale (U.S.)	419	Sussex (U.S.)	448	Taihoa (R.N.Z.N.)	112
Shinnan (J)	253	Skipjack	56	Spaekhuggeren (Da)	173	Stockham (U.S.)	411	Sussexvale (R.C.N.)	97	Taimur (R.P.N.)	113
Shipley Bay (U.S.)	386	Skimmer (U.S.)	433	Spahl (F)	214	Stockholm (U.S.)	411	Sustain (U.S.)	432	Taimyr (Rus)	332
Shimachidori (J)	254	Skipjack	56	Spangler (U.S.)	418	Stoddard (U.S.)	412	Sutton (U.S.)	421	Takanis Bay (U.S.)	386
Shinano (J)	253	Skrimish (U.S.)	432	Spapool	81	Stoiki (Rus)	309	Suvla	72	Takbai (Th)	358
Shirasagi (J)	254	Skomer	65	Spar (U.S.)	457	Stonechat	68	Suwanee (U.S.)	387	Takelma (U.S.)	452
Shirataka (J)	254	Skrei (Nor)	276	Sparham	58	Stonetown (R.C.N.)	97	Suzumani (J)	254	Talara (P)	284
Shkiv (Rus)	322	Skori (Rus)	309	Sparrow	44	Stord (Nor)	273	Suzutsuki (J)	254	Talent	53
Shkval (Rus)	320	Skuu	76	Sparrow (U.S.)	433	Storén (Da)	173	Svalbard (Nor)	277	Talibong (Th)	361
Shoalhaven (R.A.N.)	87	Skye	65	Sparo (Sw)	353	Storis (U.S.)	457	Svalen (Sw)	355	Talladega (U.S.)	436
Shonomish (U.S.)	458	Skyros (Gr)	230	Spasilac (Yu)	468	Stork	45	Svardfiken (Sw)	351	Tallarook (R.A.N.)	90
Short Splice (U.S.)	448	Slavni (Rus)	310	Spear (U.S.)	432	Stormcloud	56	Svenskund (Sw)	355	Tallulah (U.S.)	449
Shoulton	57	Sleipner (Nor)	275	Specter (U.S.)	432	Stormes (U.S.)	410	Svenparen (Sw)	355	Tallyho	53
				Speed (U.S.)	432	Stormflugen (Da)	175	Sverdlöv (Rus)	305, 326	Taluga (U.S.)	449
										Talybont	48
										Tamalpais (U.S.)	449

## GENERAL INDEX—continued.

## TAMANAMI (J)—VERMILION (U.S.)

T—continued		TER—TIM		TIM—TRA		TRA—TUM		TUM—URI		URK—VER	
TAM—TER	Page	Ter (Sp)	Page	Timo (I)	Page	Trafalgar	Page	Tumult	Page	Urk (N)	Page
Tamanami (J)	254	Terceira (Port)	295	Tinazette (T)	365	Tral (Rus)	322	Tumult (U.S.)	38	Ursa	269
Tamandare (Br)	136	Tercel (U.S.)	432	Tingey (U.S.)	412	Tran (Da)	175	Tuna (R.C.N.)	102	Uruguay (Ur)	459
Tamarack (U.S.)	457	Teredo	53	Tingles (U.S.)	448	Tranquility (U.S.)	443	Tung Hsin (C)	153	Urunami (J)	254
Tamarora (U.S.)	458	Terek (Rus)	329	Tinian (U.S.)	385	Transit Able (U.S.)	451	Tung Teh (C)	153	Ushuaia (A)	129
Tambor (U.S.)	428	Termagant	38	Tino (I)	251	Transit Baker (U.S.)	451	Tung Ting (C)	162	Usumacinta (Mex)	257
Tambre (Sp)	342	Ternate (N)	266	Tinosa (U.S.)	425	Transvaal (S.A.)	118	Tungan (C)	160	Ute (U.S.)	452
Tammenpää (Fin)	190	Ternen (Da)	176	Tinsman (U.S.)	416	Trare (G)	223	Tunica (U.S.)	452	Utile (F)	220
Tamoio (Br)	137	Terpischore	38	Tintagel Castle	50	Trathen (U.S.)	412	Tunisia (F)	207	Utina (U.S.)	452
Tampa (U.S.)	455	Terra Nova (R.C.N.)	98	Tinto (Sp)	342	Travis (U.S.)	456	Tunj (Yu)	467	Uthaug (Nor)	275
Tana (Nor)	275	Terror (U.S.)	438	Tippu Sultan (R.P.N.)	114	Traw (U.S.)	417	Tunny (U.S.)	426	Uto (Sw)	353
Tanager (U.S.)	432	Terrible (F)	203	Tiptoe	53	Trawn Wari (Th)	361	Tunxis (U.S.)	451	Utrecht (N)	263
Tanaro (I)	251	Terry (U.S.)	412	Tir (In)	107	Tre Kronor (Sw)	347	Tupelo (U.S.)	457	Utsira (Nor)	275
Taney (U.S.)	455	Terschelling (N)	268	Tiraille (F)	214	Treberon (F)	220	Tupi (Br)	137	Utsstein (Nor)	275
Tang (U.S.)	423	Teruzuki (J)	254	Tirante (U.S.)	423	Trefolyev (Rus)	327	Turbinist (Rus)	320	Utern (Sw)	351
Tanganyika	56	Tetcott	49	Tiree	65	Trellenaes (Da)	175	Turkey (U.S.)	433	Utvær (Nor)	275
Tanghon (Kor)	255	Tête (Port)	296	Tireless	53	Tremadoc Bay	42	Turmoil	81	Uvalde (U.S.)	437
Tangier (U.S.)	434	Teton (U.S.)	435	Tirtsa (Is)	238	Trenchant	53	Turner (U.S.)	409	Uyanik (T)	367
Tankaren (Sw)	355	Tetu (F)	220	Tiru (U.S.)	424	Trepang (U.S.)	424	Turpin	53		
Tanner (U.S.)	443	Texel (N)	268	Titania (U.S.)	437	Tresham	58	Tursas (Fin)	190		
Tanyang (C)	158	Texelstroom (N)	268	Titano (I)	251	Trespasser	53	Tuscaloosa (U.S.)	399		
Tapir	53	Thaddeus Parker (U.S.)	417	Titepu (Ind)	234	Trevoga (Rus)	326	Tuscan	38		
Tappahannock (U.S.)	449	Thames	57	Tjorn (Sw)	354	Triaina (Gr)	228				
Tara (Yu)	465	Thankerton	57	Tjurko	353	Tritident (F)	214				
Tarantola (I)	250	Thayanghon (Th)	560	Toba (A)	130	Tritident (Br)	140				
Tarawa (U.S.)	381	Theodore E. Chandler (U.S.)	408	Tobago (Eg)	186	Trofogio (I)	248				
Tarentule (F)	218	Thermistokles (Gr)	228	Tobruk (R.A.N.)	86	Trigger (U.S.)	423				
Tarifa (Sp)	344	Thermopylae	53	Tocogay	65	Trillium (U.S.)	458				
Tarik (Eg)	186	Theseus	17	Tofino (Sp)	343	Tringa (U.S.)	451				
Tariq (R.P.N.)	114	Theseus (Gr)	230	Toia (R.N.Z.N.)	112	Trinidad (A)	127				
Tarmo (Fin)	191	Thetis (Da)	172	Token	53	Trinity (R.C.N.)	100				
Tarno (Sw)	353	Thetis Bay (U.S.)	386	Token (U.S.)	432	Triomphant (F)	203				
Tarpon (U.S.)	428	Thiow Uthok (Th)	361	Toledo (U.S.)	397	Tripoli (U.S.)	386				
Tartu (F)	203	Thira (Gr)	230	Tollberg (U.S.)	429	Tritão (Br)	140				
Taskizak (T)	370	Thisbe	56	Tolman (U.S.)	415	Triton (Da)	172				
Tatekumara (J)	254	Thistle (U.S.)	457	Tolovana (U.S.)	449	Triton (Sp)	342				
Tatnuck (U.S.)	452	Thomas E. Fraser (U.S.)	415	Tolowa (U.S.)	452	Triton (U.S.)	456				
Tatum (U.S.)	429	Thomas F. Nickel (U.S.)	416	Tomahawk (U.S.)	449	Triummi (Rus)	320				
Taupo (R.N.Z.N.)	110	Thomas Jefferson	436	Tomás Marin (Mex)	258	Triumph	17				
Taurus	53	Thomas J. Gary (U.S.)	419	Tombazis (Gr)	228	Triumph (U.S.)	432				
Taussig (U.S.)	410	Thomason (U.S.)	418	Tombigbee (U.S.)	450	Triunfo (Br)	140				
Tautog (U.S.)	428	Thomaston (U.S.)	438	Tomich (U.S.)	419	Trodday	65				
Tawakoni (U.S.)	452	Thompson (U.S.)	415	Tomochodori (J)	254	Tromp (N)	262				
Tawasa (U.S.)	452	Thonburi (Th)	358	Toms (Rus)	312	Tromso	72				
Tay	46	Thor (Ice)	232	Tonawanda (U.S.)	451	Tromsø (N)	274				
Taylor (U.S.)	413	Thorn (U.S.)	414	Tone (I)	253	Trondheim (Nor)	273				
Tazewell (U.S.)	436	Thornback (U.S.)	423	Tongkeo (Th)	361	Trondra	65				
Tbilisi (Rus)	312	Thorough	53, 88	Tongland (Th)	361	Tross (Rus)	322				
Tchapayev (Rus)	305	Thrasher (U.S.)	433	Tongliu (Th)	360	Trouncer	72				
Tcherbakov (Rus)	305	Threadfin (U.S.)	424	Tongyong (Kor)	255	Trout (U.S.)	423				
Tchkalov (Rus)	305	Threat (U.S.)	432	Tonkawa (U.S.)	452	Truckee (U.S.)	449				
Te An (C)	160	Throsk	80	Tonnerre (F)	220	Truelove	56				
Teaberry (U.S.)	451	Thrush (U.S.)	433	Tonocote (A)	130	Trujillo (Dom)	178				
Teak (U.S.)	451	Thruster	72	Tontti (U.S.)	450	Trump	53				
Teak (U.S.)	451	Thuban (U.S.)	437	Tootcha (Rus)	320	Trumpeter	72				
Teakol	78	Thule	53	Topeka (U.S.)	402	Trumpeter (U.S.)	421				
Teazer	38	Thule (Sw)	355	Tor (Eg)	188	Trumpetfish (U.S.)	423				
Tees	46	Thunder (R.C.N.)	100	Tor (Nor)	275	Truncheon	40				
Tehuantepec (Mex)	257	Tiaré (F)	215	Torbes (Ven)	463	Truxton (U.S.)	429				
Teise (Nor)	276	Tibbenham	58	Torgud Reis (T)	363	Truxton (U.S.)	429				
Tejo (Port)	292	Tiburón (P)	283	Toro (U.S.)	423	Tryphon	81				
Tejsten (Da)	176	Ticino (I)	251	Toronto (R.C.N.)	97	Tsatalza (Gr)	229				
Tekesta (U.S.)	452	Ticonderoga (U.S.)	380	Torquay	41	Tai Nan (C)	160				
Telamon (U.S.)	446	Tiderace	76	Torrent (F)	220	Tsing Pai (C)	160				
Telemachus	53, 88	Tiderange	76	Torsk (U.S.)	423	Tsugumi (J)	254				
Telfair (U.S.)	436	Tidereach	76	Tortuga (U.S.)	438	Tsurishima (J)	254				
Temerario (Sp)	338	Tidewater (U.S.)	445	Tosung (Kor)	255	Tuckahoe (U.S.)	458				
Tenace (F)	220	Tiger	21	Totem	53	Tucson (U.S.)	404				
Tenace (I)	251	Tigrone (U.S.)	426	Touareg (F)	207	Tucuman (A)	126				
Tenacious	38	Tigerhaai (N)	267	Toucan (U.S.)	432	Tudor	53				
Tenby	41	Tilefish (U.S.)	424	Toulonnaise (F)	216	Tughril (R.P.N.)	114				
Tench (U.S.)	423	Tillamook (U.S.)	452	Tourterelle (F)	220	Tui (R.N.Z.N.)	111				
Teniente Herreros (Para)	278	Tillman (U.S.)	414	Towhee (U.S.)	432	Tukchon (Kor)	255				
Tenino (U.S.)	452	Tills (U.S.)	421	Townsville (R.A.N.)	89	Tula (Rus)	312				
Tennessee (U.S.)	392	Timavo (I)	251	Tow	46	Tulipano (I)	248				
Tenryu (J)	253	Timbalier (U.S.)	444	Tracker	72	Tulipe (F)	213				
Ter (F)	214	Timbira (Br)	137	Trad (Th)	358	Tumlaren (Sw)	351				
		Timmerman (U.S.)	406	Tradewind	53	Tumleren (Da)	173				

**GENERAL INDEX—continued.**

## VÖL—WAR

VOL—WAR	Page
Voluntario (Br) ...	140
Volynetz (Rus) ...	332
Vorma (Nor) ...	276
Vormes (Da) ...	175
Voron (Rus) ...	314
Voroshilov (Rus) ...	306
Voroshilovsk (Rus) ...	323
Vorovsky (Rus) ...	323
Vortice (I) ...	246
Vosges (F) ...	216
Vouga (Port) ...	232
Voyager (R.A.N.) ...	85
Vulcain (F) ...	215
Vulcan (U.S.) ...	446
Vulcano (Sp) ...	342
Vyatcheslav Molotov (Rus) ...	331
Vydra (Rus) ...	325
Vyekha (Rus) ...	322
Vyouga (Rus) ...	320
Vzryf (Rus) ...	322

Waalajik (N) .....	268
Wabash (U.S.) .....	450
Waccamaw (U.S.) .....	449
Wachusett (U.S.) .....	454
Wacissa (U.S.) .....	450
Wadleigh (U.S.) .....	411
Wadsworth (U.S.) .....	412
Waekwanho (Kor) .....	255
Wager .....	35
Wagga (R.A.N.) .....	89
Wagner (U.S.) .....	420
Wahoo (U.S.) .....	423
Wakamidori (J) .....	254
Wakasaki (J) .....	254
Wakataka (J) .....	254
Wakazuki (J) .....	254
Wakefield (U.S.) .....	441
Wakeful .....	39
Wakerobin (U.S.) .....	458
Walcheren .....	72
Walcheren (N) .....	269
Waldron (U.S.) .....	410
Walke (U.S.) .....	410
Walker (U.S.) .....	413
Wallace L. Lind (U.S.) .....	410
Wallaceburg (R)C.N.) .....	98
Waller (U.S.) .....	413
Walnut (U.S.) .....	457
Walrus (N) .....	267
Walrus (U.S.) .....	423
Walsh (U.S.) .....	429
Walter B. Cobb (U.S.) .....	429
Walter C. Wann (U.S.) .....	417
Walter S. Gorka (U.S.) .....	429
Walter X. Young (U.S.) .....	429
Walton (U.S.) .....	417
Wampanoag (U.S.) .....	452
Wan Kuo (C) .....	163
Wan Lee (C) .....	163
Wandank (U.S.) .....	452
Wantuck (U.S.) .....	427
War Hindoo .....	4 9
Warbler (U.S.) .....	31
Warden .....	3
Warmingham .....	58
Warramunga (R.A.N.) .....	58

## Page

Warrego (R.A.N.)	...	...	88
Warrick (U.S.)	...	...	437
Warrington (U.S.)	...	...	408
Warrior	...	...	17
Warsash	...	...	57
Wasatch (U.S.)	...	...	435
Washburn (U.S.)	...	...	437
Washington (U.S.)	...	...	390
Wasp (U.S.)	...	...	380
Watchful	...	...	80
Waterlee (U.S.)	...	...	452
Waterwitch	...	...	56
Watts (U.S.)	...	...	412
Wave	...	...	56
Wave Baron	...	...	77
Wave Chief	...	...	77
Wave Commander	...	...	77
Wave Conqueror	...	...	77
Wave Duke	...	...	77
Wave Emperor	...	...	77
Wave Governor	...	...	77
Wave King	...	...	77
Wave Knight	...	...	77
Wave Laird	...	...	77
Wave Liberator	...	...	77
Wave Master	...	...	77
Wave Monarch	...	...	77
Wave Premier	...	...	77
Wave Prince	...	...	77
Wave Protector	...	...	77
Wave Regent	...	...	77
Wave Ruler	...	...	77
Wave Victor	...	...	77
Waveney	...	...	71
Waxbill (U.S.)	...	...	433
Waxsaw (U.S.)	...	...	451
Waxwing (U.S.)	...	...	432
Wear	...	...	46
Weber (U.S.)	...	...	429
Webster (U.S.)	...	...	446
Wedderburn (U.S.)	...	...	411
Wedgewood (Is)	...	...	237
Weeden (U.S.)	...	...	418
Wega (G)	...	...	223
Wei Yuan (C)	...	...	161
Weiss (U.S.)	...	...	423
Welcome	...	...	56
Welfare	...	...	56
Welles (U.S.)	...	...	414
Wenatchee (U.S.)	...	...	452
West (Rus)	...	...	327
West Virginia (U.S.)	...	...	391
Westerschelde (N)	...	...	268
Westmount (R.C.N.)	...	...	99
Westwind (U.S.)	...	...	456
Wexham	...	...	58
Whaddon	...	...	49
Whale (U.S.)	...	...	425
Wheatear (U.S.)	...	...	432
Wheatland	...	...	49
Whetstone (U.S.)	...	...	438
Whidbey (U.S.)	...	...	452
Whippingham	...	...	58
Whipoorwill (U.S.)	...	...	433
Whirlwind	...	...	39
Whitby	...	...	41
White Alder (U.S.)	...	...	457
White Bush (U.S.)	...	...	457
White Heath (U.S.)	...	...	457
White Holly (U.S.)	...	...	457
White Lupine (U.S.)	...	...	457

## Page

White Marsh (U.S.)	438
White Pine (U.S.)	457
White Plains (U.S.)	386
White Sage (U.S.)	457
White Sumac (U.S.)	457
Whitehurst (U.S.)	418
Whitesand Bay	42
Whiteside (U.S.)	437
Whitethroat (R.C.N.)	100
Whitley (U.S.)	437
Wiay	65
Wichita (U.S.)	398
Wickes (U.S.)	412
Widemouth Bay	42
Widgeon (U.S.)	433
Wigtown Bay	42
Wild Goose	44
Wildervank (N.)	268
Wildwood (R.C.N.)	101
Wiley (U.S.)	412
Wilhelm Pieck (G)	221
Wilhoite (U.S.)	420
Wilk (Po)	239
Wilkes (U.S.)	414
Wilkes-Barre (U.S.)	402
Wilkinson (U.S.)	405
Willard Keith (U.S.)	410
Willem van der Zaan (N)	266
Willemoes (Da)	173
William C. Cole (U.S.)	418
William C. Lawe (U.S.)	409
William J. Pattison (U.S.)	429
William M. Hobby (U.S.)	429
William M. Wood (U.S.)	409
William R. Rush (U.S.)	409
William Seiverling (U.S.)	417
William T. Powell (U.S.)	420
Williams (U.S.)	417
Williamsburg (U.S.)	435
Willis (U.S.)	419
Willis A. Lee (U.S.)	405
Willmarth (U.S.)	418
Willow (U.S.)	457
Willow Lake (Rus)	322
Wilton	49
Wiltzie (U.S.)	408
Windham Bay (U.S.)	386
Windlass (U.S.)	452
Winnabago (U.S.)	454
Winnipeg (R.C.N.)	98
Winona (U.S.)	454
Winslow (U.S.)	421
Winston (U.S.)	437
Wirun (Th)	359
Wisconsin (U.S.)	388
Wiseman (U.S.)	418
Wistaria (U.S.)	458
Witek (U.S.)	407
Wizard	39
Woendi (N)	270
Woerden (N)	268
Wolf (R.C.N.)	100
Woodbine (U.S.)	457
Woodbridge Haven	51
Woodcock	44
Woodpecker (U.S.)	433
Woodrush (U.S.)	457
Woodson (U.S.)	417
Woolsey (U.S.)	414
Woolwich	69
Woomera (R.A.N.)	90

## Page

Worcester (U.S.)	...	...	400
Wrangeli (U.S.)	...	...	445
Wrangler	...	...	39
Wren	...	...	44
Wren (U.S.)	...	...	412
Wright (U.S.)	...	...	385
Wu Chang (C)	...	...	152
Wu Feng (C)	...	...	155
Wu Kung (C)	...	...	163
Wu Sung (C)	...	...	161
Wuling (C)	...	...	162
Wyandot (U.S.)	...	...	437
Wyndham (Iri)	...	...	236
Wyche (U.S.)	...	...	451

Xanthi (Gr)	...	...	...	230
Xanthus (U.S.)	...	...	...	446
Xauen (Sp)	...	...	...	343

Ya Lung (C)	...	...	162
Yadak Bar (Per)	...	...	279
Yakori (Rus)	...	...	322
Yakutat (U.S.)	...	...	454
Yamacraw (U.S.)	...	...	459
Yamadori (J)	...	...	254
Yamagiku (J)	...	...	252
Yamagara (J)	...	...	254
Yamana (A)	...	...	130
Yamasemi (J)	...	...	254
Yamazuki (J)	...	...	254
Yancey (U.S.)	...	...	437
Yankton (U.S.)	...	...	458
Yara (Cu)	...	...	170
Yarnall (U.S.)	...	...	412
Yastrab (Rus)	...	...	314
Yavapai (U.S.)	...	...	451
Yavuz (T)	...	...	364
Yazoo (U.S.)	...	...	451
Yeaton (U.S.)	...	...	456
Ye Atsu (R.N.Z.N.)	...	...	112
Yelcho (Chil)	...	...	150
Yellowstone (U.S.)	...	...	445
Yen An (C)	...	...	155
Yermak (Rus)	...	...	332
Yi Hsien (C)	...	...	160
Yildiray (T)	...	...	366
Ying Hao (C)	...	...	152
Ying Shan (C)	...	...	152
Ymer (Sw)	...	...	355
Yocona (U.S.)	...	...	458
Yoihuo (Kor)	...	...	255
Yokes (U.S.)	...	...	429
Yolo (U.S.)	...	...	451
Yonaguska (U.S.)	...	...	458
Yorktown (U.S.)	...	...	380
Yosemite (U.S.)	...	...	445
Yoshiro (J)	...	...	253
Yosif Stalin (Rus)	...	...	331
Ypiranga (Br)	...	...	138
Young (U.S.)	...	...	412
Yser (Bel)	...	...	133
Yser (F)	...	...	212
Yuchuan (C)	...	...	163
Yufu-Maru (J)	...	...	254
Yuma (U.S.)	...	...	455

## Page

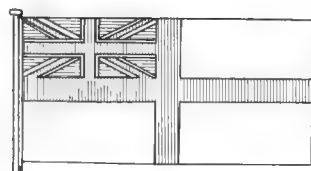
Yun Ho (C)	...	...	...	152
Yung An (C)	...	...	...	152
Yung Chang (C)	...	...	...	161
Yung Chia (C)	...	...	...	161
Yung Ching (C)	...	...	...	160
Yung Chun (C)	...	...	...	161
Yung Feng (C)	...	...	...	161
Yung Hsiang (C)	...	...	...	162
Yung Hsing (C)	...	...	...	161
Yung Hsiu (C)	...	...	...	161
Yung Hwo (C)	...	...	...	161
Yung Kang (C)	...	...	...	161
Yung Kan (C)	...	...	...	161
Yung Ning (C)	...	...	...	153
Yung Ping (C)	...	...	...	161
Yung Sheng (C)	...	...	...	152
Yung Shou (C)	...	...	...	161
Yung Shun (C)	...	...	...	161
Yung Sui (C)	...	...	...	161
Yung Tai (C)	...	...	...	153
Yung Ting (C)	...	...	...	161
Yuri (J)	...	...	...	252
Yüzbas Hakkı (T)	...	...	...	254
Yuzuki (J)	...	...	...	257

Zafer (T) ...	...	...	365
Zaghoun (F) ...	...	...	220
Zaire (Port) ...	...	...	295
Zakynthos (Gr) ...	...	...	229
Zambesi ...	...	...	38
Zamboango del Sur (Phil) ...	...	...	285
Zapal (Rus) ...	...	...	322
Zarnitza (Rus) ...	...	...	315
Zaragoza (Mex) ...	...	...	258
Zarayd (Rus) ...	...	...	322
Zbik (Po) ...	...	...	288
Zeal (U.S.) ...	...	...	432
Zealous ...	...	...	35
Zebra ...	...	...	35
Zeebrugge ...	...	...	72
Zeefakkel (N) ...	...	...	269
Zeeland (N) ...	...	...	263
Zeeleuw (N) ...	...	...	267
Zelengora (Yu) ...	...	...	467
Zelima (U.S.) ...	...	...	447
Zellars (U.S.) ...	...	...	410
Zenit (Rus) ...	...	...	327
Zenith ...	...	...	35
Zephyr ...	...	...	35
Zest ...	...	...	38
Zetempowwiec (Po) ...	...	...	289
Zeus (Gr) ...	...	...	230
Zeus (U.S.) ...	...	...	446
Zhdanov (Rus) ...	...	...	305
Zhelesnyakov (Rus) ...	...	...	305
Zhelyznakov (Bul) ...	...	...	141
Zhelyeznyakov (Rus) 2 ships ...	...	...	326
Zhorki (Rus) ...	...	...	311
Zijpe (N) ...	...	...	269
Zinnia (F) ...	...	...	214
Zodiac ...	...	...	35
Zodiak (Po) ...	...	...	289
Zuiderdiep (N) ...	...	...	268
Zulfikar (R.P.N.) ...	...	...	115
Zulla (Ven) ...	...	...	461
Zuraw (Po) ...	...	...	289
Zwaardvisrh (N) ...	...	...	267

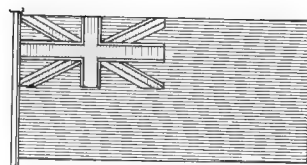


# THE ROYAL NAVY

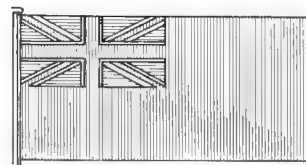
## Flags.



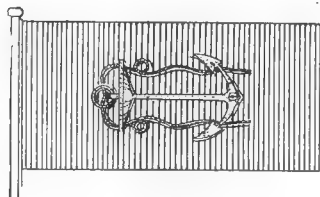
WHITE ENSIGN



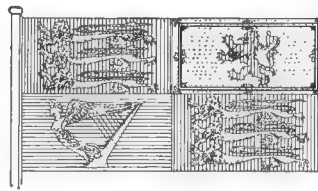
BLUE ENSIGN



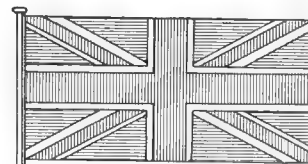
RED ENSIGN



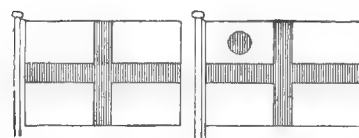
ADMIRALTY FLAG



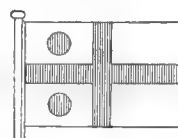
ROYAL STANDARD



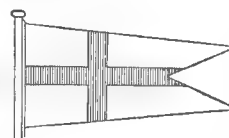
UNION FLAG



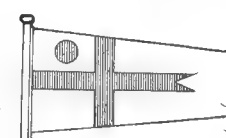
ADMIRAL



VICE-ADMIRAL



REAR-ADMIRAL

COMMODORE,  
SENIOR OFFICER  
(at yard-arm)COMMODORE,  
SECOND CLASS

Note.—Admiral of the Fleet wears the Union flag at the main.

## Board of Admiralty.

*First Lord* : The Right Hon. J. P. L. Thomas, Esq., M.P.

*First Sea Lord and Chief of Naval Staff*: Admiral of the Fleet Sir Rhoderick R. McGrigor, G.C.B., D.S.O.

*Second Sea Lord and Chief of Naval Personnel*: Admiral The Hon. Sir Guy H. E. Russell, G.B.E., K.C.B., D.S.O.

*Third Sea Lord and Controller* : Vice-Admiral Sir Ralph A. B. Edwards, K.C.B., C.B.E.

*Fourth Sea Lord and Chief of Supplies and Transport* : Vice-Admiral F. R. Parham, C.B., C.B.E., D.S.O.

*Fifth Sea Lord and Deputy Chief of Naval Staff (Air)* : Rear-Admiral A. N. C. Bingley, O.B.E.

*Vice Chief of Naval Staff* : Vice-Admiral W. W. Davis, C.B., D.S.O. and Bar.

*Deputy Chief of Naval Staff* : Vice-Admiral E. A. G. Clifford, C.B., C.B.E.

*Parliamentary and Financial Secretary* : Commander A. H. Noble, M.P.

*Civil Lord* : S. Wingfield Digby, Esq., M.P.

*Permanent Secretary* : Sir John Lang, K.C.B.

## Some principal Admiralty officials (not on the Board):

*Engineer-in-Chief of the Fleet*: Vice-Admiral (E) F. T. Mason.

*Director of Naval Construction* : Sir Victor G. Shephard, K.C.B., R.C.N.C., M.I.N.A.

*Deputy Controller* : Rear-Admiral J. W. Cuthbert, C.B.E.

*Assistant Chief of Naval Staff* : Rear-Admiral M. G. Goodenough, C.B.E., D.S.O.

## Uniforms.

Admiral  
of the  
Fleet.

Admiral.

Vice-  
Admiral.Rear-  
Admiral  
and  
1st Class  
Com-  
modore.2nd Class  
Com-  
modore.

Captain.

Com-  
mander.Lieut.-  
Com-  
mander.

Lieut.

Sub-  
Lieut. and  
Senior  
Com-  
missioned  
Officer.Com-  
missioned  
Officer.

## RELATIVE RANKS, NON-EXECUTIVE BRANCHES

<i>Engineer Officers</i> have same as above, with purple cloth between stripes.		
<i>Electrical</i>	"	dark green
<i>Ordnance Engineer</i>	"	purple
<i>Supply and Secretariat</i>	"	white
<i>Instructor</i>	"	light blue
<i>Constructor</i>	"	silver grey
<i>Shipwright</i>	"	silver grey
<i>Medical</i>	"	scarlet
<i>Dental</i>	"	orange
<i>Wardmaster</i>	"	salmon pink
<i>Special Branch, R.N.V.R.</i>	"	light green

## RESERVE OFFICERS

"Qualified officers" of both the Royal Naval Reserve and the Royal Naval Volunteer Reserve wear same as above. (Applies in wartime only.)

Other officers of the permanent R.N.R. and R.N.V.R. wear same as above but with letter "R" inside the curl.

Officers of the R.N.V.R. Air Branch wear letter "A" instead of "R" inside curl.

Temporary officers of all categories wear similar to above but with "wavy" curl instead of circular curl. Temporary officers becoming qualified wear circular curl in wartime.

Temporary air officers wear "A" in "wavy" curl.

## Colour of Ships.

Ships in commission : light grey hulls and superstructure with white topmasts. Ships in reserve : light grey overall. Submarines : Home, dark grey ; Mediterranean, royal blue ; Far East, dark green.

Destroyers, frigates, ocean minesweepers : Leaders have 4 ft. black band round top of first or visible funnel ; divisional leaders now have no funnel markings. All ships have their flotilla numbers painted on funnel.

Royal Fleet Auxiliaries have black hulls, light grey upperworks, light grey funnel with black top, except Fleet Train ships, which conform to Fleet painting.

Surveying vessels have white hulls and superstructure with buff masts and funnels.

Ships on Persian Gulf or Red Sea stations, have white hulls and superstructure.

## Deck Recognition Letters of Aircraft Carriers

<i>Ark Royal</i>	O	<i>Indomitable</i>	A	<i>Bulwark</i>	B	<i>Theseus</i>	T
<i>Eagle</i>	J	<i>Illustrious</i>	Y	<i>Centaur</i>	C	<i>Triumph</i>	P
<i>Implacable</i>	C	<i>Victorious</i>	G	<i>Glory</i>	R	<i>Warrior</i>	W
<i>Indefatigable</i>	B	<i>Albion</i>	Z	<i>Ocean</i>	O	<i>Unicorn</i>	Y

## Personnel.\*

1947-48 : 204,000	1951-52 : 143,500	1947-48 : £196,700,000	1951-52 : £278,500,000
1948-49 : 167,300	1952-53 : 153,000	1948-49 : £153,000,000	1952-53 : £332,250,000
1949-50 : 153,000	1953-54 : 151,000	1949-50 : £189,250,000	1953-54 : £329,500,000
1950-51 : 143,000	1954-55 : 139,000	1950-51 : £193,000,000	1954-55 : £353,000,000

\*Officers and ratings. Figures includes Royal Marines, Women's Royal Naval Service, and Queen Alexandra's Royal Naval Nursing Service.

## Mercantile Marine.

Lloyd's Register appendix, 1954 : 6,079 vessels of 18,692,299 tons gross.

## LIST OF PENDANT NUMBERS.

## Destroyers and Frigates.

## D Flag Superior :

D 01	Caprice.
03	Concord.
05	Daring.
06	Myngs.
07	Caesar.
09	Dunkirk.
10	Cassandra.
14	Armada.
15	Cavendish.
17	Alamein.
18	St. Kitts.
19	Zephyr.
20	Comus.
22	Aisne.
24	Gravelines.
25	Carysfort.
26	Comec.
27	Savage.
29	Charity.
30	Carron.
31	Broadsword.
32	Camperdown.
34	Cockade.
35	Diamond.
36	Chieftain.
38	Nizam.
39	Zealous.
43	Matapan.
44	Lagos.
47	Gabbard.
48	Contest.
51	Chevron.
52	Chaplet.
54	Zodiac.
55	Finisterre.
57	Cossack.
58	Milne.
60	Sluys.
61	Chequers.
62	Jutland.
64	Scorpion.
D 65	St. James.
68	Barrosa.
70	Solebay.
71	Constance.
73	Cavalier.
74	Hogue.
76	Consort.
77	Trafalgar.
79	Cadiz.
80	Barfleur.
81	Zebra.
82	Creole.
84	Saintes.
85	Cambrian.
86	Agincourt.
90	Cheviot.
91	Childers.
95	Zenith.
96	Crossbow.
97	Corunna.
103	Kempfenfelt.
106	Decoy.
108	Dainty.
114	Defender.
118	Battleaxe.
119	Delight.
125	Nepal.
126	Diana.
135	Marne.
139	Obdurate.
149	Norman.
154	Duchess.
165	Noble.
168	Crispin.
186	Musketeer.
231	Vigo.
248	Obedient.
252	Matchless.
273	Meteor.
297	Napier.
298	Wager.

## F Flag Superior :

F 02	Zest.
05	Atherstone.
06	Bigbury Bay.
07	Actaeon.
12	Bamborough Castle.
15	Eggesford.
16	Stevenstone.
18	Flamingo.
20	Snipe.
21	Dart.
22	Wheatland.
23	Teazer.
24	Blencathra.
25	Southdown.
28	Wren.
29	Verulam.
30	Mermaid.
33	Opossum.
35	Enard Bay.
38	Cygnets.
39	Hind.
40	Troubridge.
41	Volage.
42	Modeste.
44	Tenacious.
45	Wild Goose.
47	Fleetwood.
49	Pheasant.
50	Venus.
53	Undaunted.
54	Petard.
55	Silverton.
57	Black Swan.
58	Hart.
60	Alacrity.
64	Nereide.
66	Starling.
67	Tyrian.
69	Redpole.
70	Farndale.
71	Sparrow.
72	Wizard.
75	Haydon.
76	Virago.
79	Brissenden.
81	Stork.
F 82	Magpie.
83	Ulster.
86	Pelican.
87	Eglinton.
89	Allington Castle.
90	Woodcock.
92	Exe.
93	Vigilant.
96	Peacock.
98	Orwell.
105	Alnwick Castle.
106	Urania.
111	Fernie.
112	Albrighton.
116	Amethyst.
118	Talybont.
120	Garth.
121	Tumult.
123	Crane.
128	Wilton.
130	Blankney.
132	Belvoir.
133	Terpsichore.
134	Bicester.
135	Cattistock.
137	Hambleton.
138	Rapid.
141	Undine.
142	Brocklesby.
145	Whaddon.
146	Cleveland.
148	Holderness.
150	Bleasdale.
152	Cowdray.
154	Cotswold.
155	Ballinderry.
156	Tuscan.
157	Wrangler.
158	Quantock.
159	Wakeful.
162	Croome.
166	Zambesi.
168	Ulysses.
169	Paladin.
173	Melbreak.
174	Middleton.

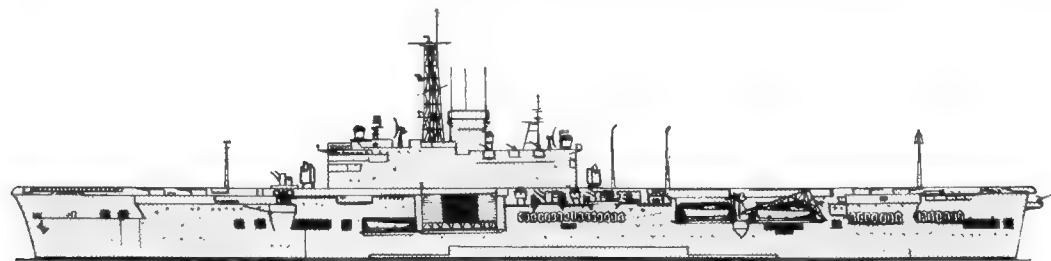
F 176	Brecon.
180	Opportune.
182	Meynell.
185	Relentless.
187	Whirlwind.
189	Termagant.
190	Ledbury.
192	Pythchley.
193	Rocket.
195	Roebuck.
196	Urchin.
197	Grenville.
198	Oakley.
199	Tetcott.
206	Avonvale.
219	Ness.
220	Ursa.
221	Chelmer.
230	Wear.
232	Tay.
235	Jed.
241	Kale.
248	Waveney.
252	Helford.
253	Helmsdale.
257	Derg.
269	Meon.
286	Amberley Castle.
294	Towy.
355	Hadleigh Castle.
356	Odzani.
362	Porchester Castle.
365	Lochy.
367	Taff.
372	Rushen Castle.
379	Carisbrooke Castle.
383	Flint Castle.
384	Leeds Castle.
386	Hedingham Castle.
387	Berkeley Castle.
388	Dumbarton Castle.
389	Knaresborough Castle.
390	Loch Fada.
391	Loch Killin.
397	Launceston Castle.
399	Tintagel Castle.

F 413	Farnham Castle.
420	Kenilworth Castle.
423	Largo Bay.
425	Loch Dunvegan.
428	Loch Alvie.
429	Loch Fyne.
431	Loch Tarbet.
433	Loch Insh.
434	Loch Quoich.
436	Surprise.
437	Loch Lomond.
449	Pevensy Castle.
525	Ribble.
530	Oakham Castle.
583	Hotham.
600	St. Bride's Bay.
603	Loch Argaig.
604	Start Bay.
605	Tremadoc Bay.
608	Padstow Bay.
609	Loch Craigie.
615	Widemouth Bay.
616	Wigtown Bay.
619	Loch Glendhu.
620	Loch Gorm.
622	Burghhead Bay.
624	Morecombe Bay.
627	Mounts Bay.
628	Loch Killisport.
630	Cardigan Bay.
633	Whitesand Bay.
634	St. Austell Bay.
636	Carnarvon Bay.
639	Loch More.
644	Cawsand Bay.
645	Loch Ruthven.
647	Alert.
648	Loch Scavaig.
650	Porlock Bay.
651	Vernan Bay.
655	Loch Tralaig.
658	Loch Veyatie.
690	Caistor Castle.
691	Lancaster Castle.
692	Oxford Castle.
693	Morpeth Castle.

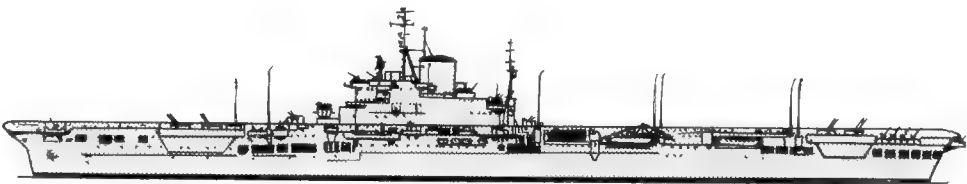
## PENDANT NUMBERS—continued.

### Landing Ships, Minesweepers, Submarines, etc.

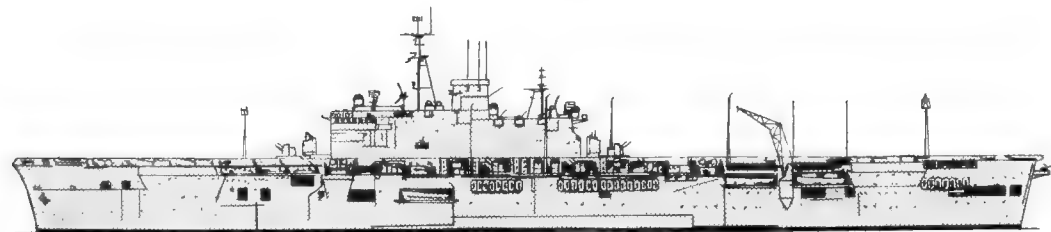
[illegible]



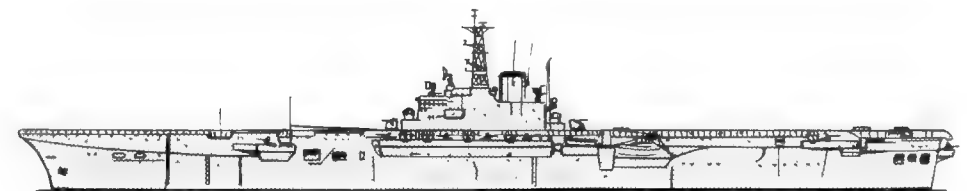
ARK ROYAL.



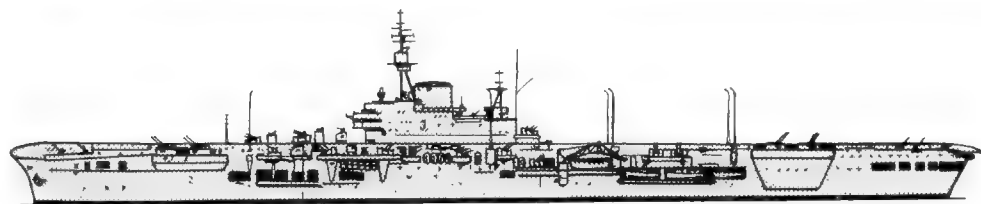
ILLUSTRIOUS.



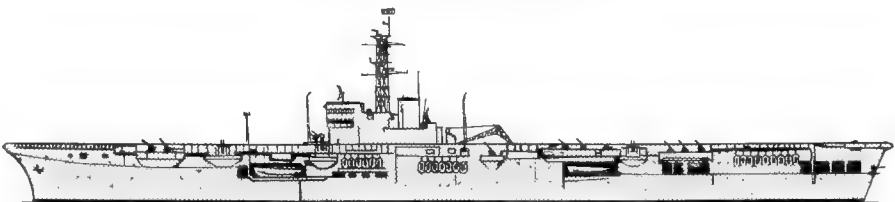
EAGLE.



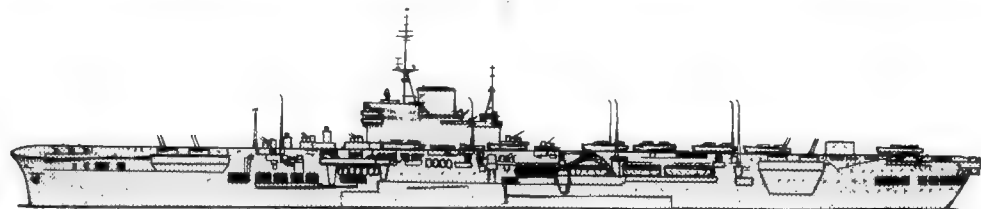
ALBION, BULWARK, CENTAUR.



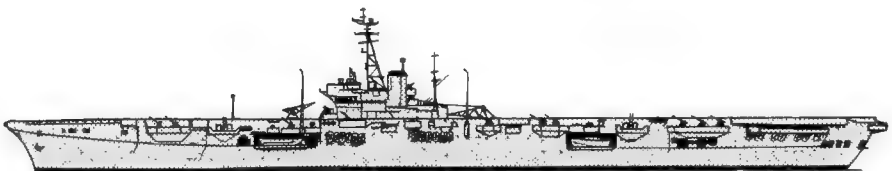
IMPLACABLE



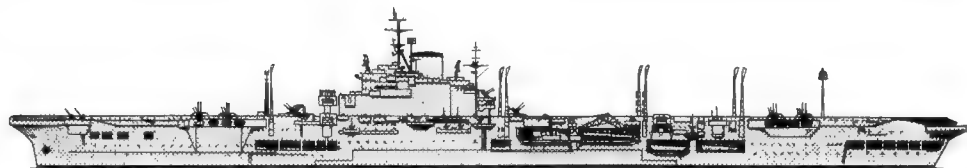
WARRIOR



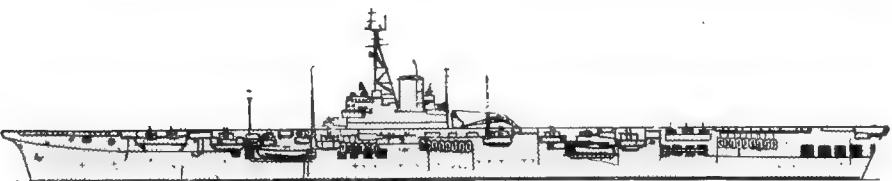
INDEFATIGABLE.



OCEAN.

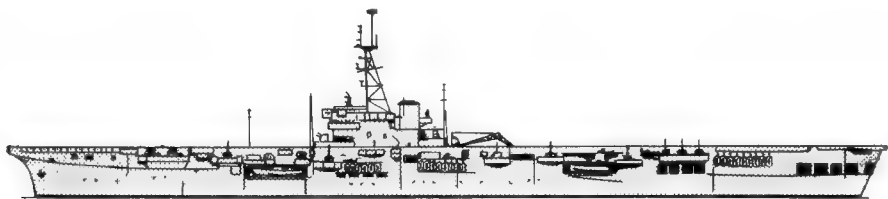


INDOMITABLE.

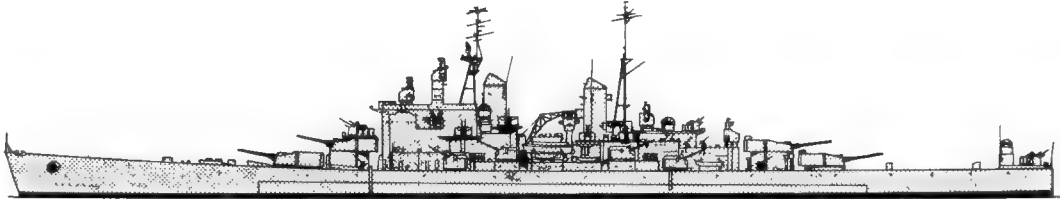


THESEUS and TRIUMPH.

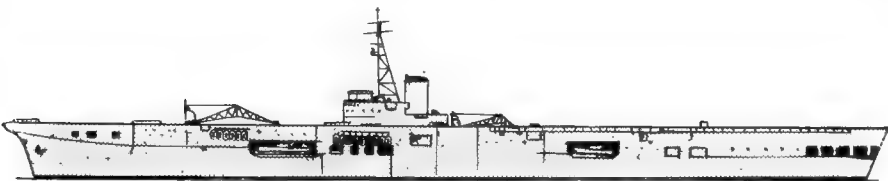




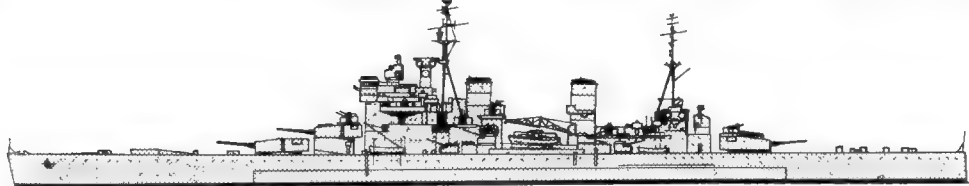
GLORY.



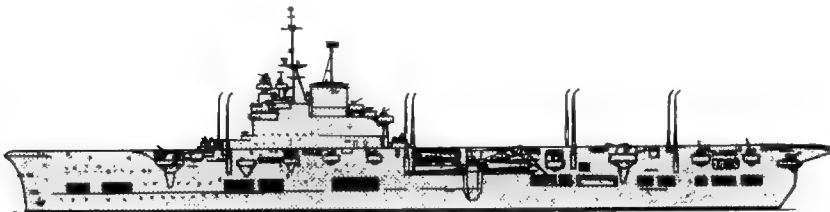
VANGUARD.



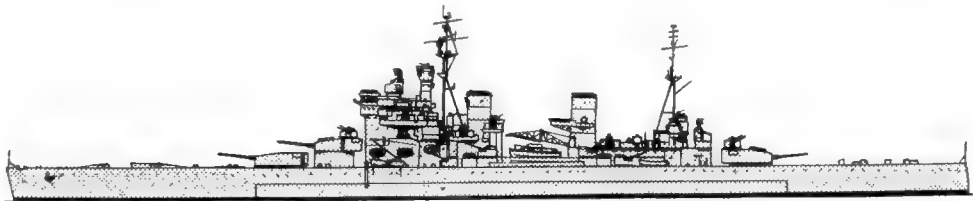
PERSEUS  
(Ferry Carrier.)



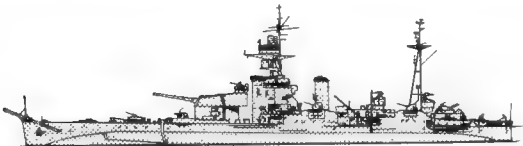
ANSON.  
(Different type directors than in others of class, no gun on side or after funnel.)



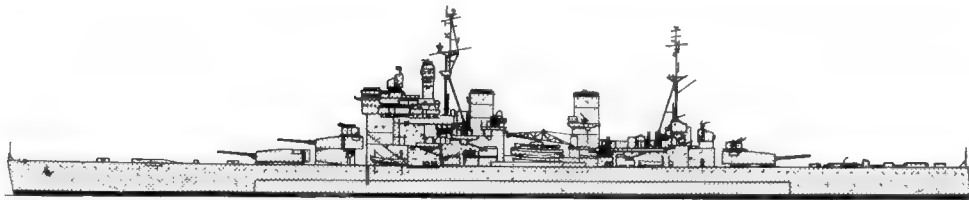
UNICORN.  
(Ferry Carrier.)



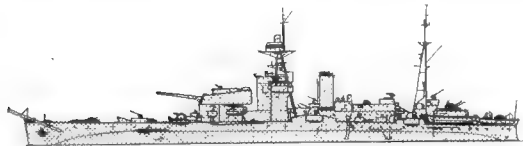
DUKE OF YORK.  
(Platform on after funnel.)



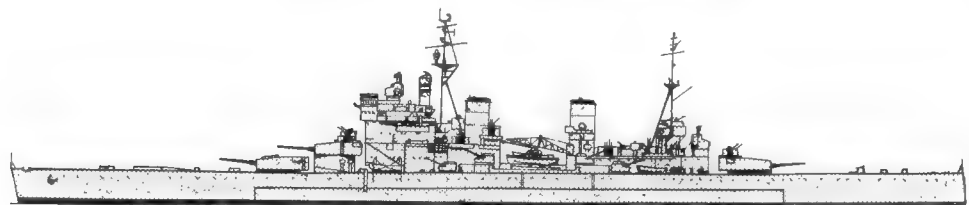
ABERCROMBIE.  
(Monitor.)



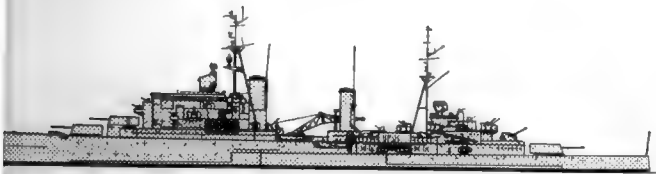
HOWE.  
(Only ship with foremast yard at starfish level.)



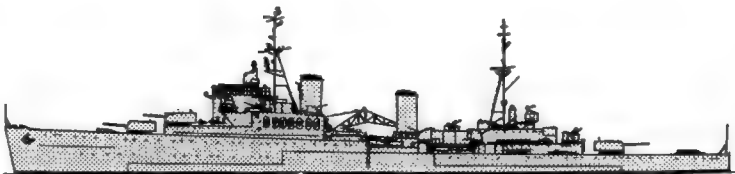
ROBERTS.  
(Monitor.)



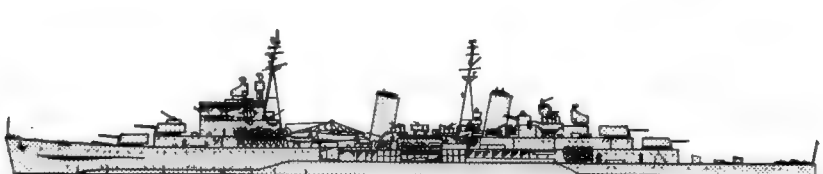
KING GEORGE V.  
(S.L. on after funnel.)



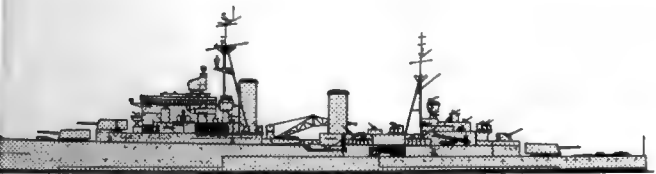
SUPERB.



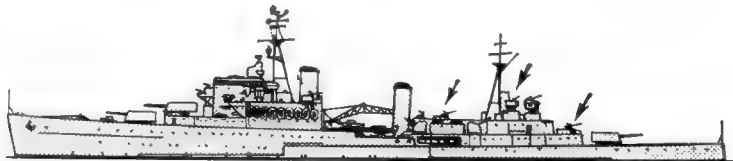
KENYA.  
JAMAICA has homing beacon before after funnel and no tower close to mainmast.



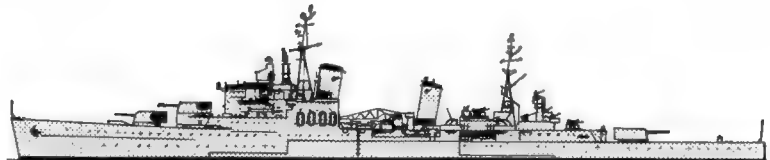
BELFAST.



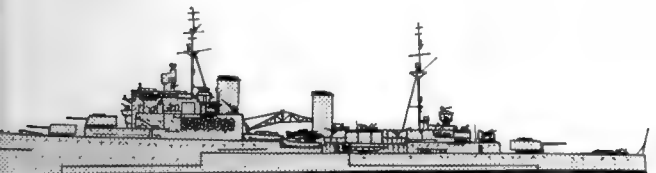
SWIFTSURE.



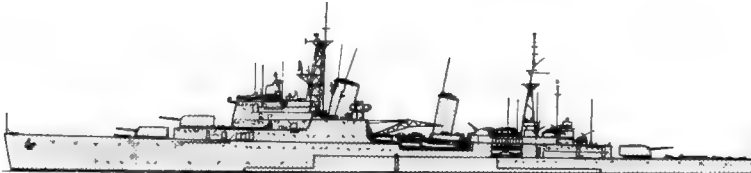
GAMBIA.



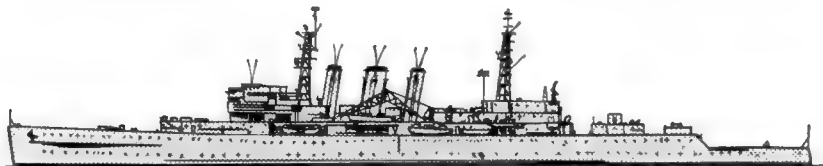
LIVERPOOL.



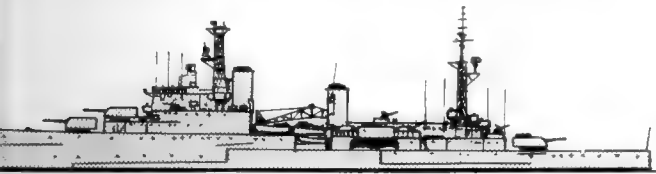
CEYLON.  
(Only ship with D.T. raised.)



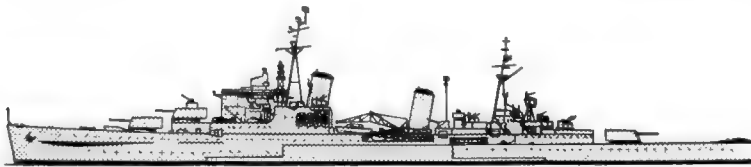
BIRMINGHAM, (NEWCASTLE with knuckle in bow)



CUMBERLAND.  
Trials cruiser. All 8 inch turrets removed.



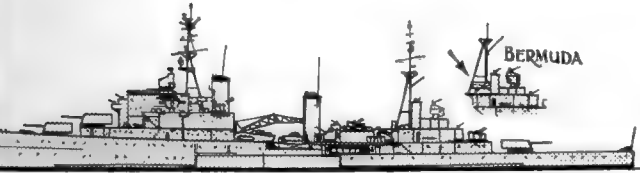
NEWFOUNDLAND.  
(two lattice masts.)



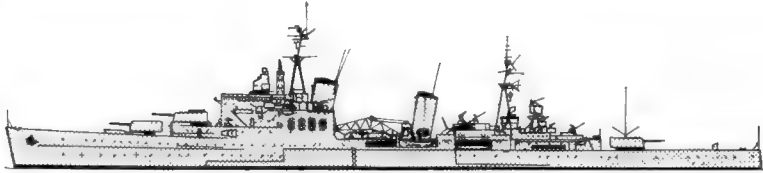
GLASGOW.  
(Homing beacon abaft after funnel).



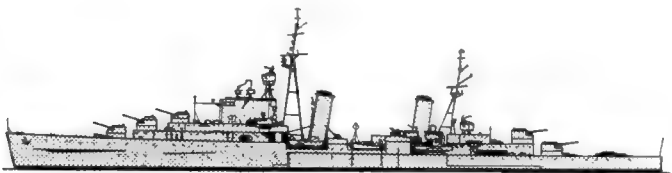
DIADEM.  
ROYALIST without TT and with yard on mainmast lower.



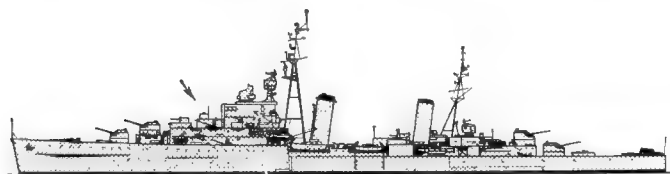
MAURITIUS.  
BERMUDA as inset no whip aerials.



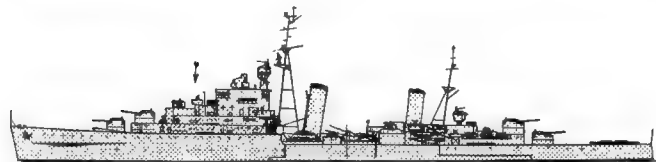
SHEFFIELD



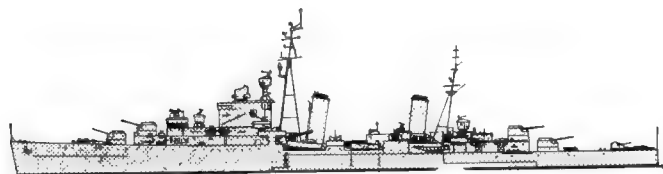
DIDO and SIRIUS



CLEOPATRA.



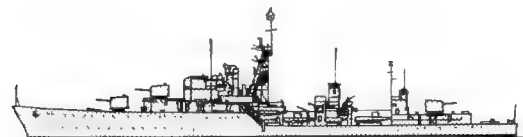
EURYALUS.



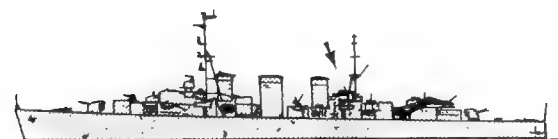
ARGONAUT.



PHOEBE.  
Spider on foremast higher than on others of this class.



DARING Class.



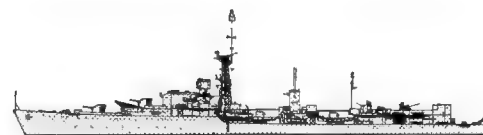
APOLLO.



ARIADNE.



MANXMAN.



CROSSBOW. SCORPION has new type yard.



BATTLEAXE and BROADSWORD.



Later "BATTLE" Class.



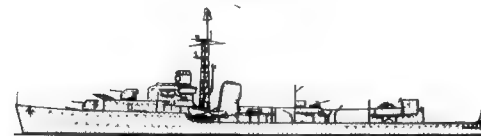
Early "BATTLE" Class.



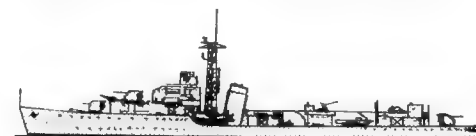
FINISTERRE.



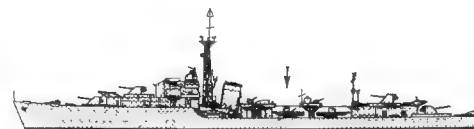
MILNE.  
MATCHLESS with tall foremast.  
MARNE no mainmast and shorter after  
superstructure.



COMET.  
No TT or "X" and "Y" guns. M/L chutes.



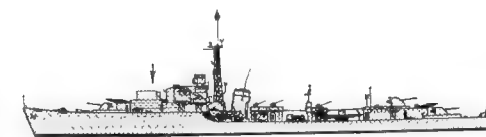
CHAPLET.  
With minelaying chutes.



"Ca" Type.  
Some without mainmast.



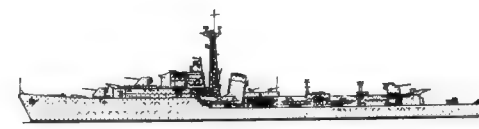
CHEQUER S, CHEVIOT, COCKADE.  
Two squids, handling room instead of "X" gun.



CREOLE and CRISPIN.



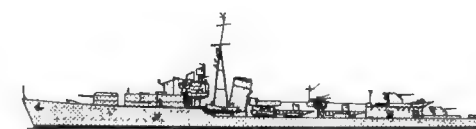
ZEPHYR.



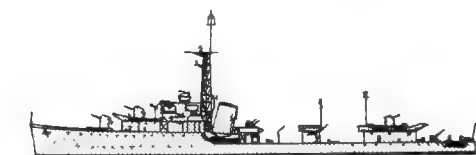
ZODIAC.  
ZENITH with mainmast, no "Y" gun.  
ZEBRA with mainmast.



MYNGS.



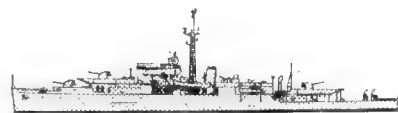
SAVAGE.



OBEDIENT.  
OBDURATE similar



TENACIOUS Type.  
(Fast Frigates. Limited Conversion.)



Later BLACK SWAN Class.



"BAY" Class.



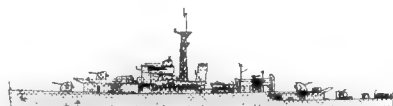
"CASTLE" Class.



ALGERINE Class.  
PLUTO without gun.  
ROMOLA, TRUELOVE, WAVE  
have gunhouse.  
(Ocean Minesweepers.)



ORWELL.  
(Fast Frigate. Smaller Limited Conversion.)



BLACK SWAN.



"LOCH" Class.



"RIVER" Class.



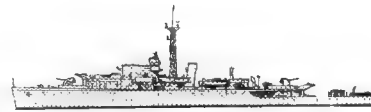
FRANKLIN.  
SCOTT similar.  
(Surveying Vessels.)  
Modified Ocean Minesweepers.



RELENTLESS Type.  
(ROCKET with knuckle strake in bow)  
(Fast A/S Frigates. Full Conversion.)



FLAMINGO, WREN.



STORK.



HELMSDALE.



SEAGULL, SHACKLETON.  
(Surveying Vessels.)  
Modified Ocean Minesweepers.



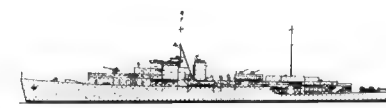
BRECON, BRISSENDEN.  
("HUNT" Group, Type IV.)



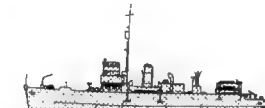
WILD GOOSE.



ALERT, SURPRISE  
(Despatch Vessels.)  
Modified Frigates.



MEON.  
(Landing Ship Headquarters.)  
Modified Frigate.



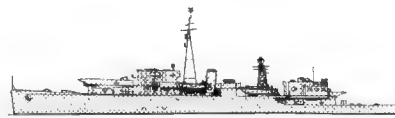
PLOVER.  
(Minelayer.)



ALBRIGHTON Class.  
("HUNT" Group, Type III.)  
Various slight differences in class.



PELICAN.



REDPOLE.  
(Navigational Training Ship.)  
Modified Frigate.



DALRYMPLE.  
COOK, DAMPIER, OWEN without  
deckhouse in after superstructure  
(Surveying Vessels.) Modified Frigates.



LINNET.  
(Coastal Minelayer.)



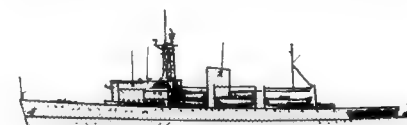
BLANKNEY Class.  
("HUNT" Group, Type II.)  
Individual ships vary.



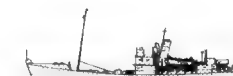
ATHERSTONE Class.  
("HUNT" Group, Type I.)



STARLING.  
(Navigational Training Ship.)  
Modified Frigate.

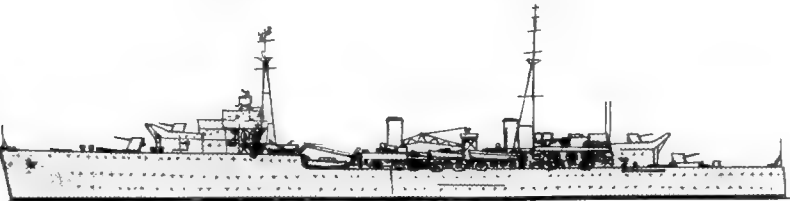


VIDAL.  
(Surveying Vessel.)

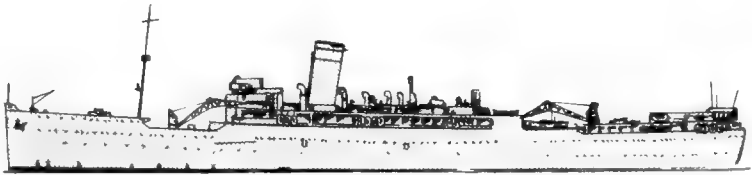


REDSHANK.  
(Controlled Minelayer.)





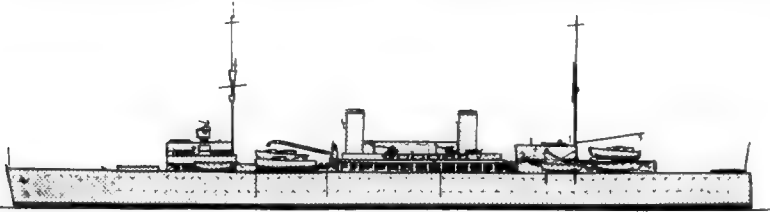
TYNE.  
(Destroyer Depot Ship.)



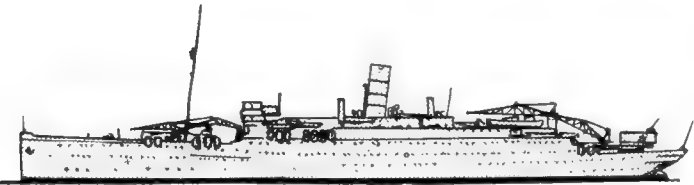
RANPURA.  
(Heavy Repair Ship.)



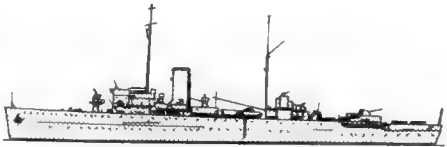
BOXER.  
(Radar Personnel Training Ship.)



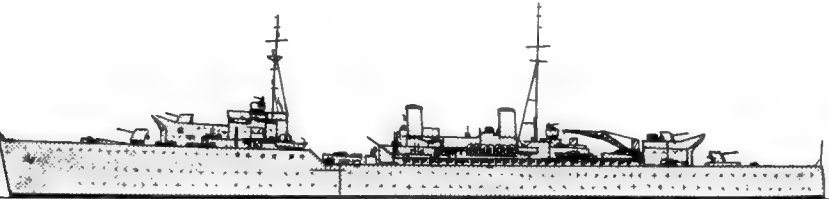
WOOLWICH.  
(Destroyer Depot Ship.)



ALAUNIA.  
AUSONIA with mainmast and with foremast abaft bridge.  
(Heavy Repair Ships.)



PROTECTOR.  
(Netlayer.)



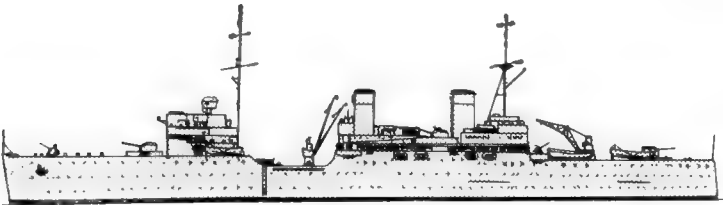
ADAMANT.  
(Submarine Depot Ship.)



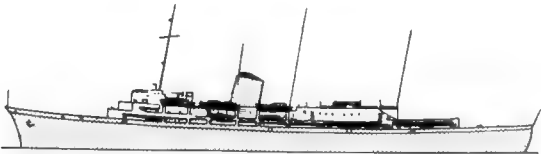
BULAWAYO.  
(Fleet Replenishment Ship.)



GUARDIAN.  
(Netlayer.)



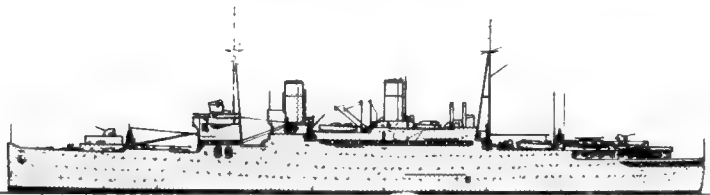
MAIDSTONE.  
FORTH without gun in bows.  
(Submarine Depot Ships.)



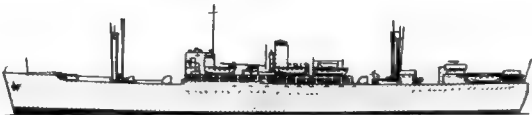
BRITANNIA.  
Royal Yacht Hospital Ship



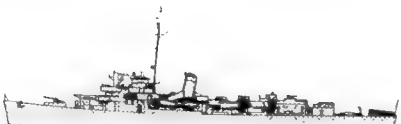
WOODBRIDGE HAVEN.  
(Submarine Target Ship.)



MONTCLARE.  
(Submarine Depot Ship.)

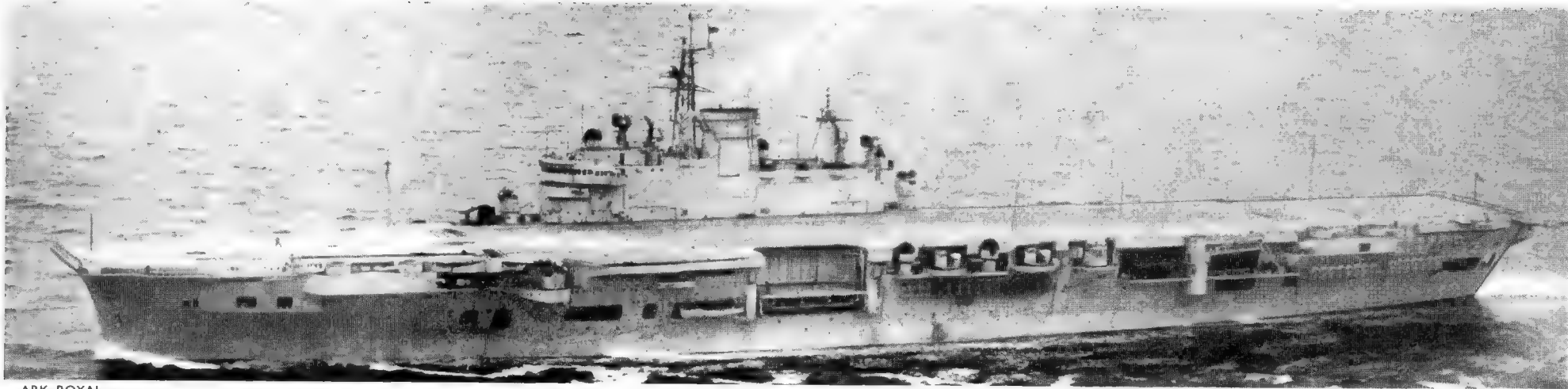


" FORT " Class (Fleet Supply Ships.)  
" MULL " and " HEAD " Classes similar.



HOTHAM.  
(Experimental ship.)

GREAT BRITAIN—Fleet Aircraft Carriers

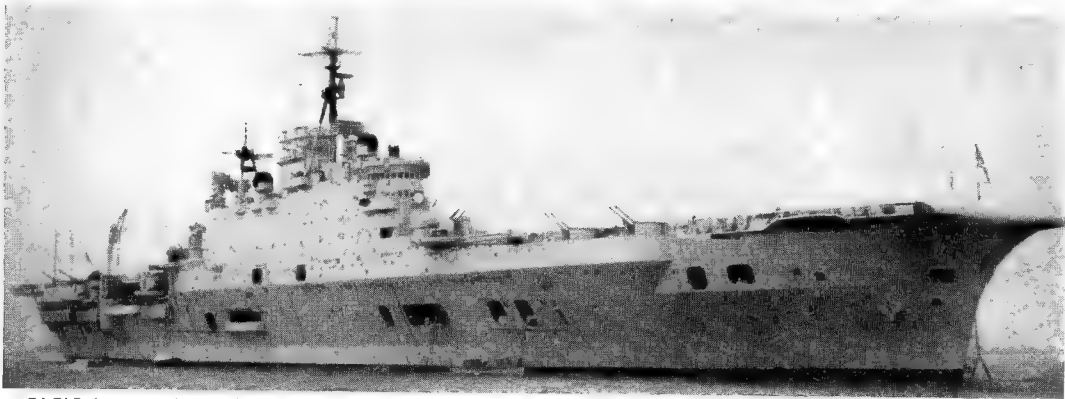


ARK ROYAL.

1954, Charles E. Brown.

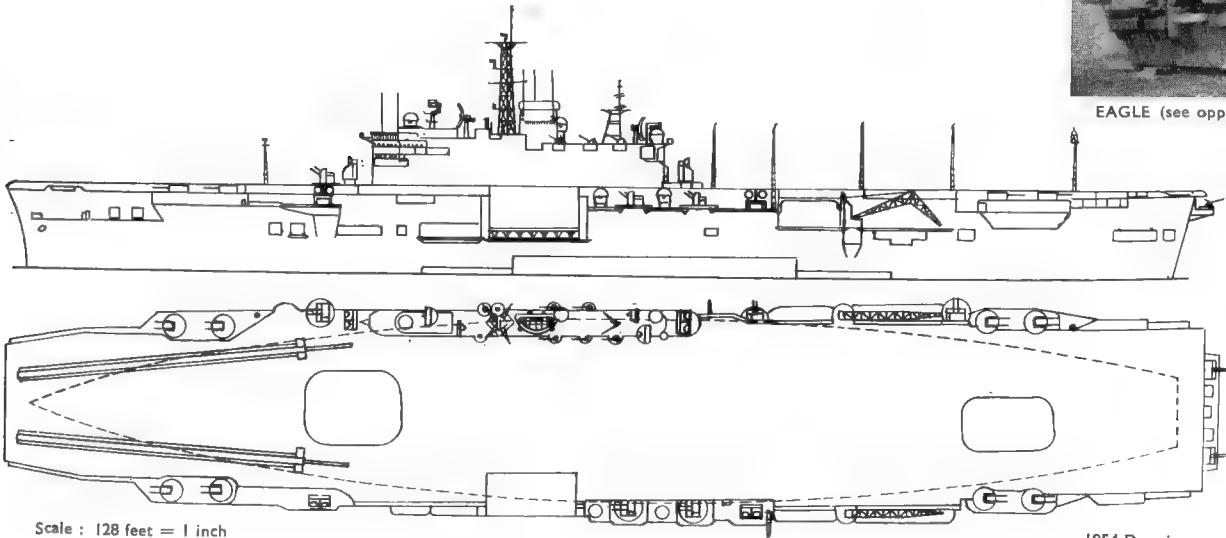
ARK ROYAL (ex-Irresistible)

Displacement : 36,800 tons standard (46,000 tons full load)  
Dimensions : Length : 720 (pp.), 808½ (o.a.) feet. Beam : 112½ feet. Draught : 36 feet  
Guns : 16—4.5 inch d.p.; 40—40 mm. Bofors AA. (6 6-barrelled, 2 twin); 4—3 pdr.  
Aircraft : 80 to 100, according to size and type.  
Machinery : Parsons single reduction geared turbines. 4 shafts. S.H.P. : 152,000 = 31.5 kts.  
Boilers : 8 Admiralty 3-drum type  
Complement : Over 2,000 total



EAGLE (see opposite page).

1954, courtesy Ian S. Pearsall, Esq.



Scale : 128 feet = 1 inch

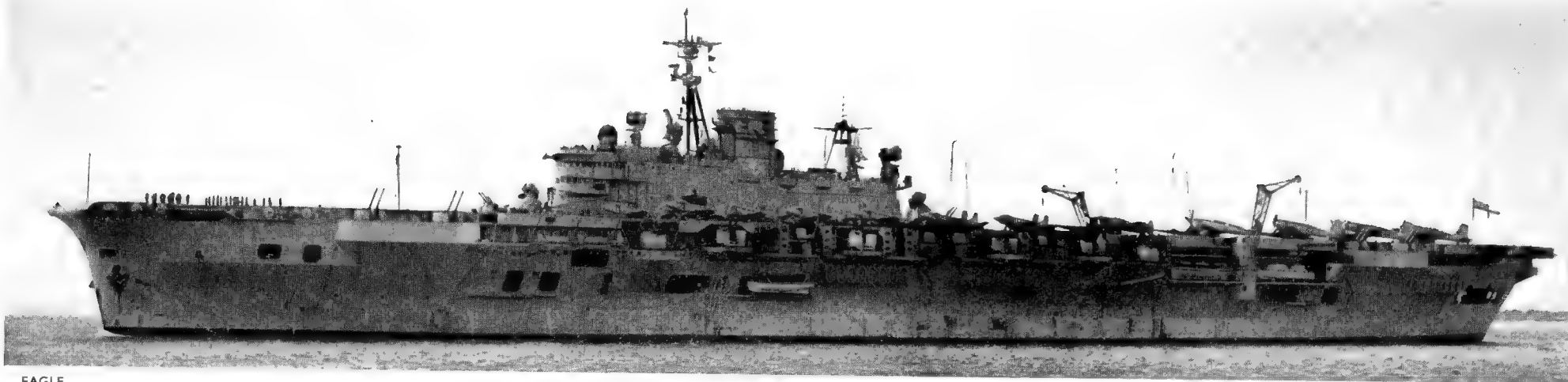
1954 Drawing

General Notes.—Largest aircraft carrier ever built for the Royal Navy. Fitted with latest equipment for operating fast and heavy jet aircraft, including the angled deck, side aircraft lift, and two steam catapults. First British aircraft carrier to be provided with the steam catapult and the deck-edge elevator. Largest ship ever built by Cammell Laird. Began contractors' sea trials 4 June, 1954. Expected to be completed for operational service in 1955.

Appearance Notes.—Easily distinguishable from sister ship Eagle by lattice mast, deck edge lift, and different arrangement of guns, etc., on the port side.

Nomenclature Notes.—Following the sinking of the first fleet aircraft carrier Ark Royal in November, 1941 the name was allocated to a considerably larger aircraft carrier projected which had previously been known as the Irresistible (the present Ark Royal).

Builders and Engineers	Laid down	Launched	Completed
Cammell Laird & Co., Ltd., Birkenhead	3 May 1943	3 May 1950	1955



1952, Wright & Logan

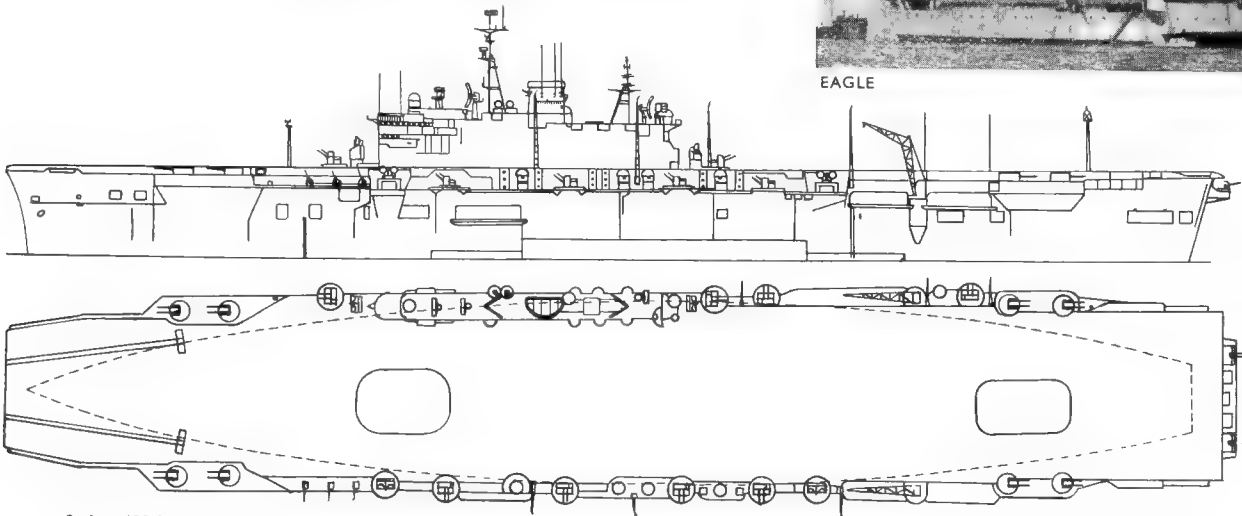
**EAGLE (ex-Audacious)**

Displacement: 36,800 tons (46,000 tons full load)  
Dimensions : Length : 720 (pp.), 803½ (o.a.) feet. Beam : 112½ feet.  
Draught : 33½ (36 max.) feet.  
Guns : 16—4.5 inch d.p., 58—40 mm. AA.  
(8 6-barrelled, 2 twins in stern sponson, 6 single)  
4—3 pdr.  
Aircraft : 80 to 110, according to size and type  
Machinery : Parsons single reduction geared turbines, 4 shafts.  
S.H.P. : 152,000 : 31.5 kts. deep load  
Boilers : 8 Admiralty 3-drum type.  
Complement : 1,425 (including ship's air complement, but excluding  
the complements of embarked air squadrons);  
(2,750 war) max. accommodation



EAGLE

1952 Wright & Logcn.



Scale : 128 feet = 1 inch.

1954 Drawing.

**General Notes.**—Ordered 19 May 1942 and finally accepted into the Royal Navy 1 March 1952. Of 90 per cent. welded construction. Damage control arrangements are exceptionally complete. Cost £15,795,000.

**Appearance Notes.**—The shape of the stern differs from that in earlier aircraft carriers. *Eagle* differs from *Ark Royal*.

**Class Notes.**—Sister ship of *Ark Royal*, see opposite page. Two more large fleet aircraft carriers of this type, *Africa* and original *Eagle*, were cancelled at the end of the Second World War. Three much larger fleet aircraft carriers, to have been named *Gibraltar*, *Malta* and *New Zealand*, were also cancelled.

**Nomenclature Notes.**—After the first aircraft carrier *Eagle* was lost in August 1942 the name was given to an aircraft carrier of the above class ordered from Vickers-Armstrongs, Ltd., Tyne, but this vessel was cancelled at the end of the war, and the sister ship which had been begun as the *Audacious* was renamed *Eagle* on January 21 1946.

Builders and Engineers	Laid down	Launched	Completed
Harland & Wolff, Ltd., Belfast.	24 Oct. 1942	19 Mar. 1946	Oct. 1951

GREAT BRITAIN—Aircraft Carriers

“Hermes” Class.

HERMES (ex-Elephant)

Displacement : 20,000 tons standard, 26,000 tons full load  
Dimensions : Length: 650 (pp.), 745 (o.a.) feet. Beam: 90 feet.  
Guns : 30—40 mm. AA. ; 4—3 pdr.  
Aircraft : 45  
Machinery : Parsons geared steam turbines. 2 shafts  
Boilers : Admiralty 3-drum type  
Complement : 1,400 total

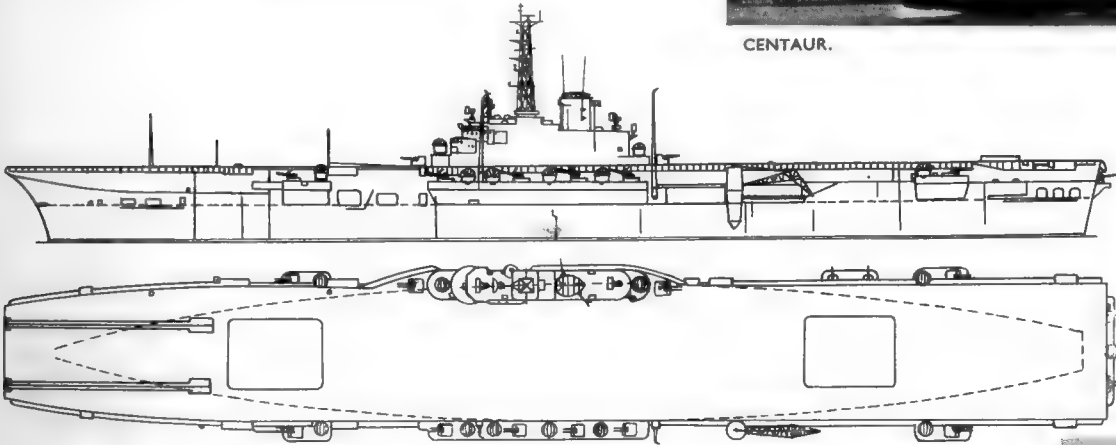
ALBION

Displacement :  
Dimensions :  
Guns :  
Aircraft :  
Machinery :  
Boilers :  
Complement :

BULWARK

20,330 tons standard, 25,910 tons full load  
Length: 650 (pp.), 737 (o.a.), feet. Beam: 90 feet.  
Extreme breadth : 120½ feet  
26—40 mm. AA. (2 6-barrelled, 5 twin, 4 single),  
4—3 pdr. (saluting)  
45  
Parsons geared turbines. 2 shafts. S.H.P. :  
80,000 = 30 kts.  
Admiralty 3-drum type  
1,028 (ship's company, including ship's air com-  
plement), 1,330 to 1,390 (including attached air  
squadron personnel)

CENTAUR



General Notes.—Improvements incorporated during construction increased the originally designed displacement figure from 18,300 tons standard. These ships are enlarged versions of the “Hercules” class with propelling machinery of nearly twice the power to give an extra five knots speed, correcting the inherent faults of the original light carlar type and bringing them more into line with modern fleet aircraft requirements. *Hermes* is still under construction. Machinery by the Wallsend Slipway & Engineering Co. Ltd. in *Albion*, by builders in other three. *Centaur* cost £10,434,000 excluding guns, aircraft and equipment. An “interim” (5½ degrees) or modified form of angled deck arrangement has been installed which necessitated the removal of three twin 40 mm. mounts and the extension of flight deck plating on port side amidships. There are six arrestor wires spaced equally along the line of the angled deck.

Appearance Note.—The shape of the stern in these ships differs from that in earlier carriers.

Class Notes.—Of eight ships of this class originally ordered, *Arrogant*, *Monmouth* and *Polyphemus* were cancelled, together with the original *Hermes*. It is reported that the *Hermes* when finally completed will be known as the “Hermes” (modernised) Class, as her design has been modified so much, and she will be virtually of a different type; in many ways she will be more advanced than the earlier ships of the class and will incorporate new equipment and improved arrangements including three post-war developments—the angled deck, the steam catapult, and the deck edge lift.

Name	Builders	Laid down	Launched	Completed
Albion	Swan, Hunter & Wigham Richardson, Ltd., Wallsend	23 Mar. 1944	6 May 1947	26 May 1954
Bulwark	Harland & Wolff, Ltd., Belfast	10 May 1945	22 June 1948	1954
Centaur	Harland & Wolff, Ltd., Belfast	30 May 1944	22 Apr. 1947	Sep. 1953
Hermes	Vickers-Armstrongs, Ltd. (Barrow)	21 June 1944	16 Feb. 1953	—



CENTAUR.

April, 1954, Wright & Logan.



ALBION.

June, 1954, Wright & Logan.



CENTAUR.

Oct., 1953, Wright & Logan.

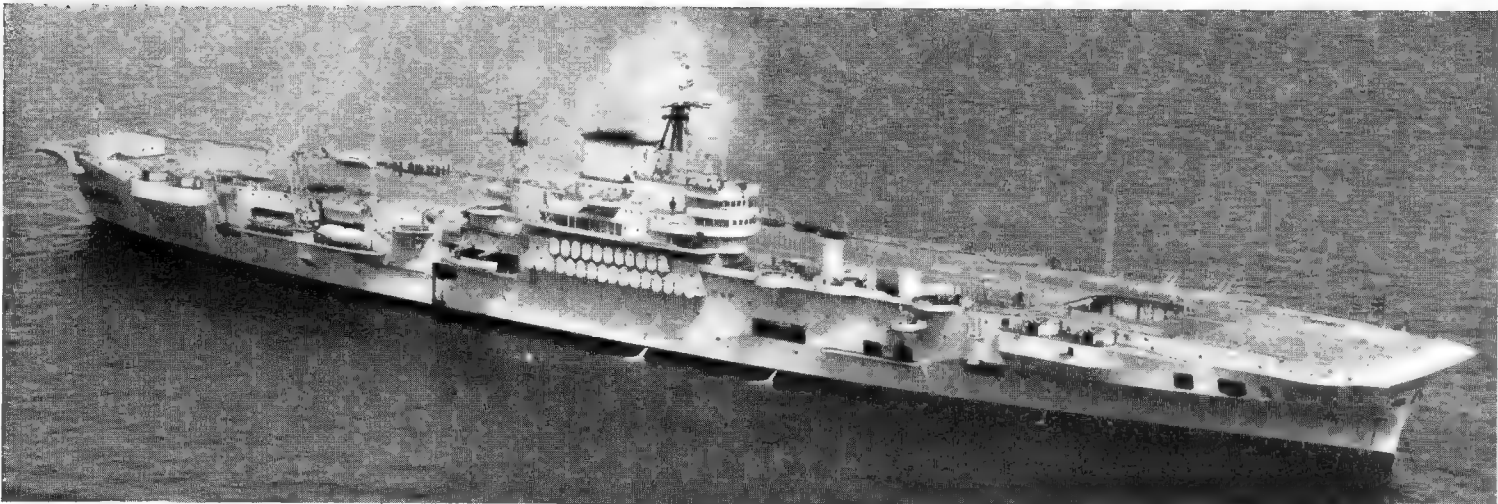


2 “Implacable” Class.

IMPLACABLE

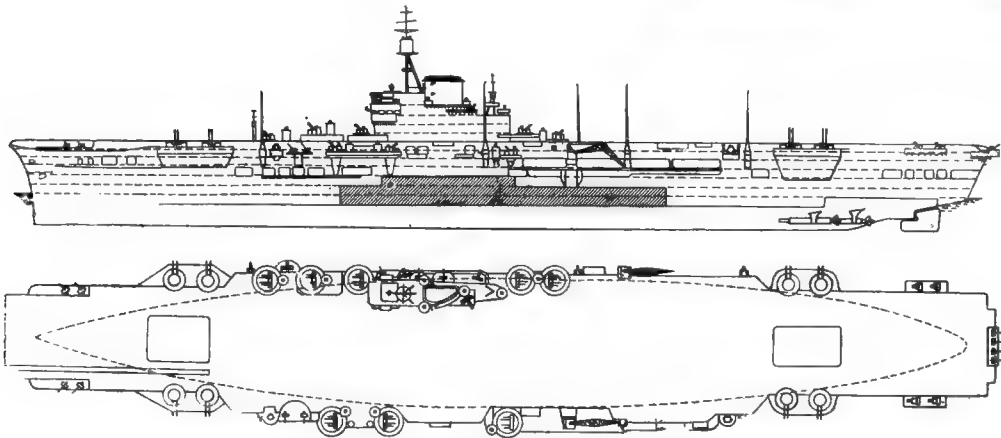
INDEFATIGABLE

Displacement : 26,000 tons (32,850 tons full load)  
Dimensions : Length : 766½ feet and 766½ feet (o.a.), respectively.  
Beam : 95½ feet. Draught : 29½ feet. Width overall : 131½ feet. Flight deck : 765 feet ; Breadth : 111½ feet  
Guns : 16—4.5 inch H.A./L.A., 12—40 mm. AA. (Bofors), 9—20 mm. AA. (Oerlikon), 52—2 pdr. pompoms, 4—3 pdr. (saluting)  
Aircraft : 72 capacity (none as training ships)  
Armour : Similar to *Indomitable*  
Machinery : Parsons single-reduction geared turbines. 4 shafts. S.H.P. : 148,000 = 32.5 kts. (31 kts. sea speed)  
Boilers : 8 Admiralty 3-drum type  
Complement : 1,785 (peace), 2,200 (war)



INDEFATIGABLE.

1954, Skyfotos.



General Notes.—Ordered under 1938 and 1939 Navy Estimates, respectively. Designed by Sir Stanley Goodall. Two hangars above each other, after lift serving both. *Implacable* was refitted 1948-49, and was flagship of the Home Fleet May 1949-July 1950, after which she was refitted for service in the Training Squadron from Nov. 1951. *Indefatigable* was taken out of reserve in 1949, and completed a refit in Devonport Dockyard in 1950 for employment in the Training Squadron. Both reduced to reserve summer 1954

Appearance Notes.—Much heavier looking than earlier carriers. Different shaped bow and stern. To distinguish between them, observe that boats of *Indefatigable* are stowed one deck higher than in *Implacable*. *Indefatigable* has box-superstructure built on towards after end of flight deck whilst employed as a training ship and D.F. top on foremast is removed. *Implacable* has Admiral's bridge projecting forward of island superstructure and flag mast stepped just abaft the stump mainmast for Commander-in-Chief's flag. Flight deck does not curve downwards.

Name	Builders and Engineers	Ordered	Laid down	Launched	Completed
<i>Implacable</i>	Fairfield S.B. & Eng. Co., Ltd. Govan.	11 Oct. 1938	21 Feb. 1939	10 Dec. 1942	28 Aug. 1944
<i>Indefatigable</i>	John Brown & Co., Ltd., Clydebank	19 June 1939	3 Nov. 1939	8 Dec. 1942	3 May 1944



IMPLACABLE.

1954, Wright & Logan.



INDEFATIGABLE.

1954, Wright & Logan.

GREAT BRITAIN—Fleet Aircraft Carrier

INDOMITABLE

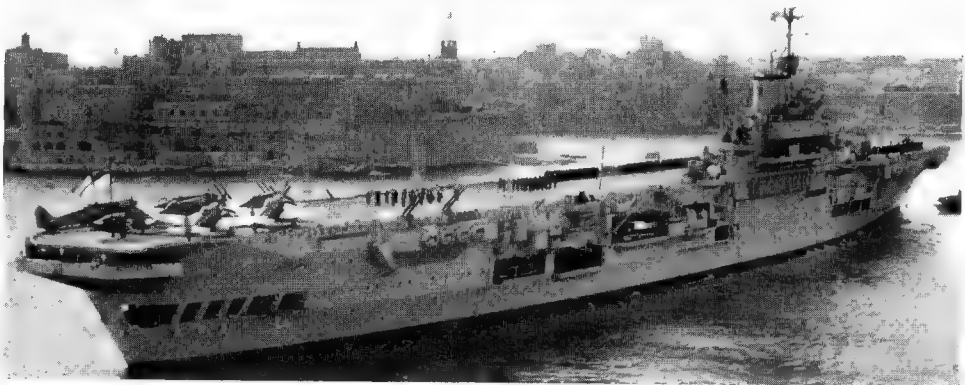
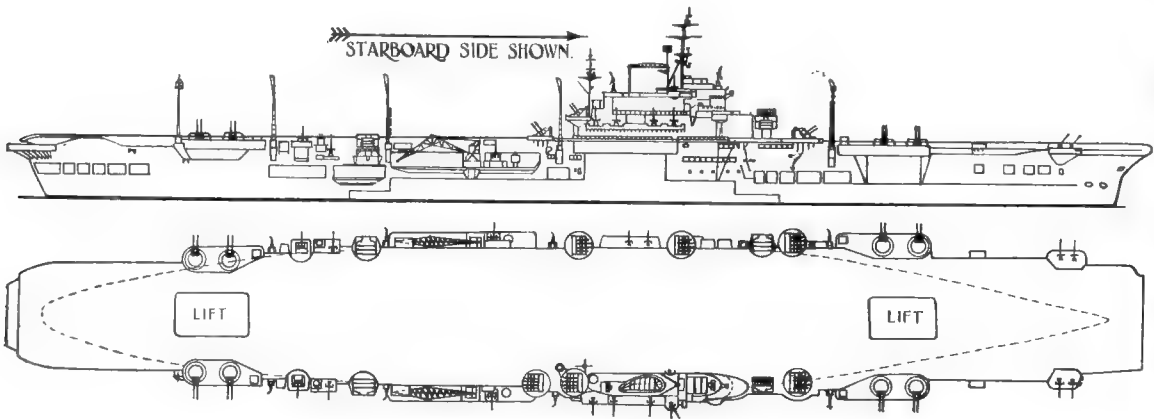
Builders : Vickers-Armstrongs, Ltd., Barrow  
Engineers : Vickers-Armstrongs, Ltd., Barrow  
Ordered : 6 July 1937  
Laid down : 10 Nov. 1937  
Launched : 26 Mar. 1940  
Completed : 10 Oct. 1941



INDOMITABLE.

1954 Wright & Logan.

Displacement : 23,500 tons standard (29,730 tons full load)  
Dimensions : Length : 754 feet (o.a.). Beam : 95½ feet. Draught : 22½ (mean), 29½ (max.) feet  
Guns : 16—4.5 inch, 24—40 mm., 40—2 pdr. pompom, 4—3 pdr. saluting  
Aircraft : 65  
Armour : Similar to *Illustrious*  
Machinery : Parsons geared turbines, 3 shafts. S.H.P. : 111,000 = 30.5 kts.  
Boilers : 6, of 3-drum type  
Oil fuel : 4,600 tons  
Complement : 1,600



INDOMITABLE.

1952 A. & J. Pavia.

General Notes.—Built under 1937 Estimates. Original design did not differ widely from *Illustrious* class, on following page, but there are two hangers, although forward lift does not serve lower hanger. Extensive refit and modernisation 1948-50, being dismantled forward and a new forward level flight deck section built on to replace the former curve down. Stern and bridges also modified. Fitted out as fleet flagship with accommodation for Commander-in-Chief and staff.

Appearance Notes.—After reconstruction differs considerably from former appearance. Bow and stern were rebuilt on lines similar to those in the light fleet carriers of the "Glory" type, and the bridge was remodelled.

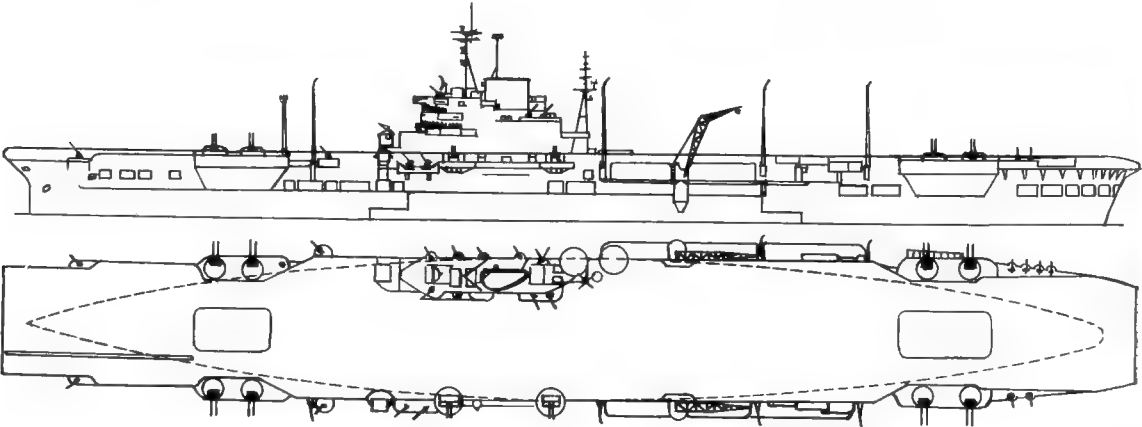
VICTORIOUS

Displacement : 30,000 tons (estimate)  
Dimensions : Length : 786 feet. Beam : 102½ feet.  
Draught : 31 feet (official)  
Guns : 16—4.5 inch, 50—40 mm. AA.  
Aircraft : 72  
Machinery : Parsons geared turbines. 3 shafts.  
S.H.P. : 110,000 = 31 kts.  
Boilers : 6 of 3-drum type  
Complement : 1,785

Notes.—Being fitted with angled flight deck, side aircraft lift, and steam catapults.  
Reconstruction involves increase in length by 35 feet, hull beam by 6½ feet, draught by 1½ feet.

ILLUSTRIOUS

Displacement : 25,500 tons (31,790 tons full load)  
Dimensions : Length : 753 feet. Beam: 95 feet.  
Draught : 29 feet (max.)  
Guns : 16—4.5 inch, 17—40 mm. AA., 6—20 mm. AA.  
40—2 pdr., 3—3 pdr. saluting.  
Aircraft : 54  
Armour : 4½" side, 4½" hanger side, 3" flight deck, 2½" hanger deck  
Machinery : Parsons geared turbines. 3 shafts.  
S.H.P. : 110,000 = 31 kts.  
Boilers : 6 of 3-drum type  
Complement : 1,600



Scale : 128 feet = 1 inch.

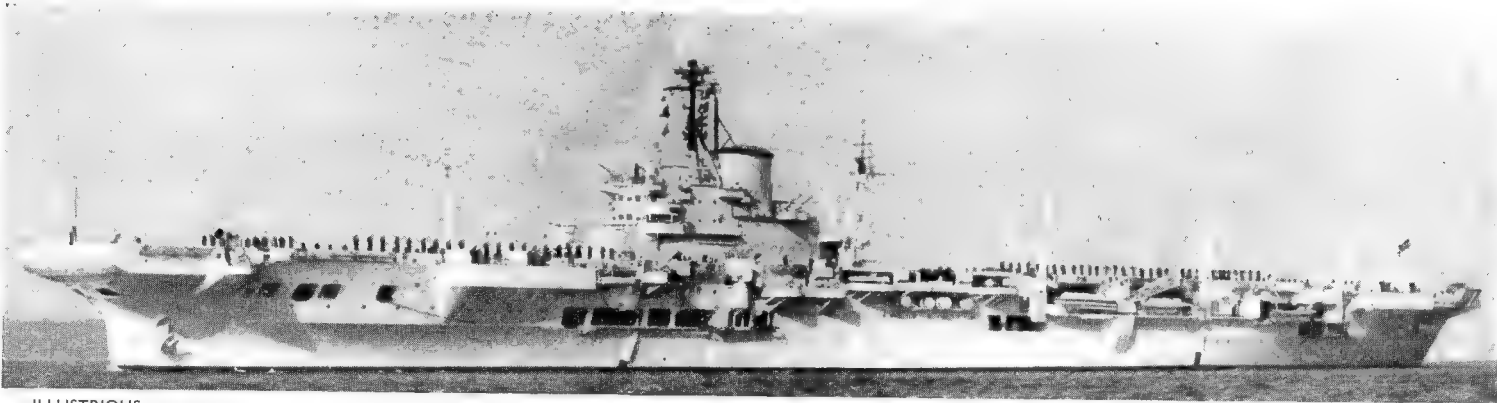
1954 Drawing.

Note to drawing.—Plan and elevation represent Illustrious only.

General Notes.—Ordered under 1936 Navy Estimates. There is one long hangar at quarter deck level. Refitted and considerably modernised Jan.-Aug., 1948 and again refitted Nov., 1950-May, 1951. Of original sister ships Victorious entered Portsmouth Dockyard in March 1950 for rebuilding and modernisation for operational service. (Reconstruction commenced 1951.) Formidable was scrapped in 1953 (towed away from Portsmouth to be broken up 7th May).

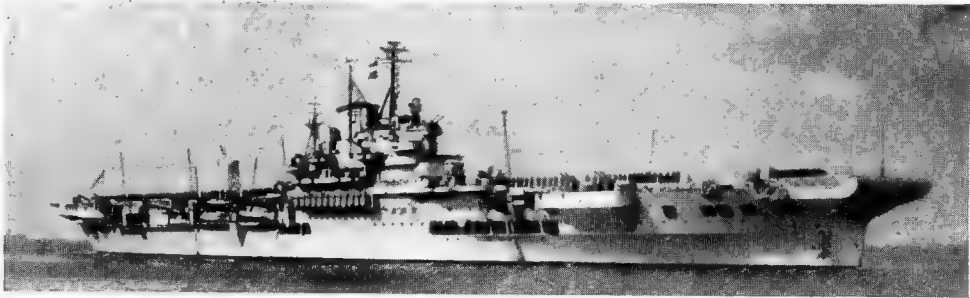
Appearance Notes.—Illustrious is easily distinguished from later carriers by general appearance, but in particular by rather smaller island with small H.A. director on forward extension. Bow and stern were rebuilt similar to light fleet aircraft carrier type.

Name	Builders	Engineers	Ordered	Laid down	Launched	Completed
Illustrious	Vickers-Armstrongs, Barrow	Vickers-Armstrongs,	13 Jan 1937	27 Apr. 1937	5 Apr. 1939	21 May 1940
Victorious	Vickers-Armstrongs, Tyne	Wallsend Slipway	13 Jan. 1937	4 May 1937	14 Sept. 1939	15 May 1941



ILLUSTRIOUS.

1954, Wright & Logan.



ILLUSTRIOUS.

1952, Wright & Logan.

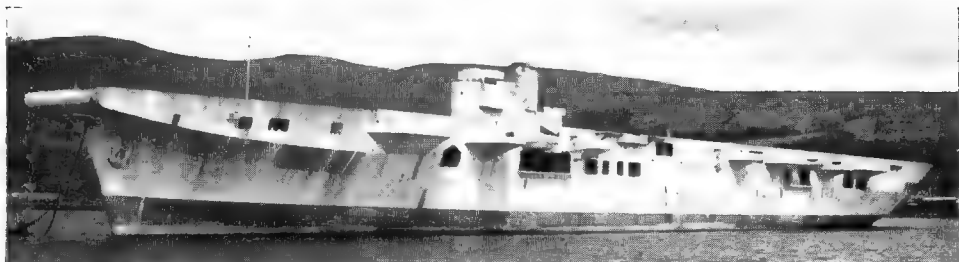


ILLUSTRIOUS

1952 Wright & Logan.

GREAT BRITAIN—Light Aircraft Carriers

2 “ Hercules ” Class.



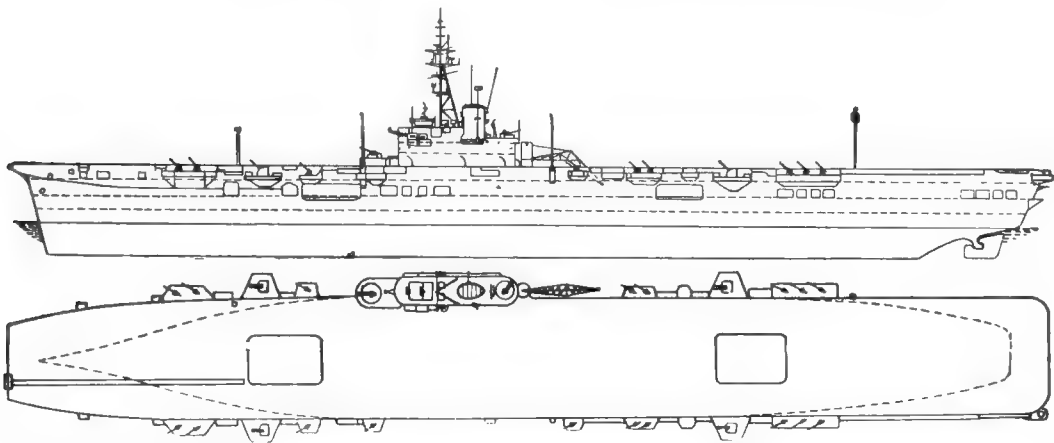
HERCULES.

1952, C. Parsons, Esq.

HERCULES

Displacement : 14,000 tons standard (19,000 tons full load)  
Dimensions : Length : 630 (pp.), 694 (o.a.) feet. Beam : 80 feet. Draught : 24 feet. Width of flight deck at island : 75 feet ; of flight deck : 80 feet ; with island : 91 feet ; with gun sponsons removed for passage through Panama Canal : 106 feet ; overall, including safety nets and gun sponsons : 112½ feet  
Guns : 25—40 mm. AA. Bofors.  
Machinery : Parsons single-reduction geared turbines. 2 shafts. S.H.P. : 42,000 = 24.5 kts. designed  
Boilers : 4 Admiralty 3-drum type (400 lb. working pressure, 700 degrees maximum superheat)

LEVIATHAN



General Notes.—Laid up at Faslane, and Portsmouth respectively. Air-conditioned and insulated for tropical service, ship's sides being sprayed with asbestos cement instead of being lagged. Separate messes and dining halls. Pressed W/T doors of smaller pattern. Steam heating round weather W/T doors to prevent clips seizing up in Arctic.

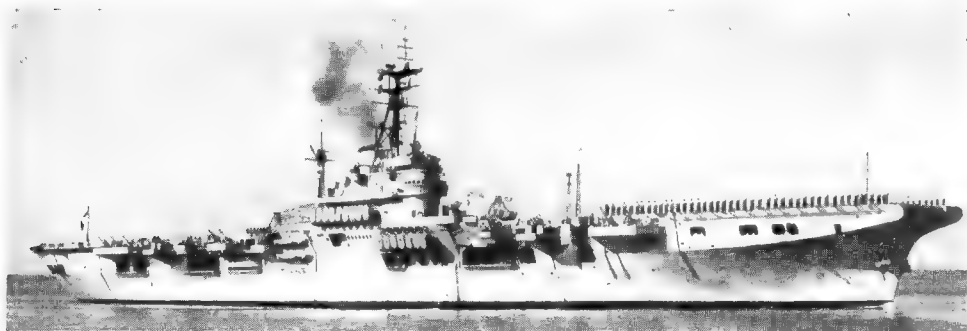
Constructional Notes.—Leviathan : Construction stopped in May, 1946, when structurally almost complete and 80 per cent fitted out. Towed to Portsmouth Dockyard in July, 1946. No work done on her since. Hercules : Construction also stopped in May, 1946, when not so far advanced.

Engineering Notes.—Turbines arranged en echelon so that starboard propeller shaft is longer than the port. Maximum speed : 25 knots.

Flight Deck Notes.—Ten arrestor wires. Catapult : single track, 20,000 lb. at 60 kts. Catapult accelerator gear port side forward.

Class Notes.—Of other ships of this class Magnificent is on loan to the Royal Canadian Navy ; Powerful (renamed Bonaventure) is being completed for the R.C.N. ; Majestic (renamed Melbourne) is being completed for the Royal Australian Navy ; and Terrible (renamed Sydney) was sold to R.A.N.

Name	Builders	Engineers	Laid down	Launched	Suspended
Hercules	Vickers-Armstrongs, Ltd. (Tyne)	Parsons	14 Oct. 1943	22 Sep. 1945	May 1946
Leviathan	Swan, Hunter & Wigham Richardson.	Wallsend	18 Oct. 1943	7 June 1945	May 1946



TRIUMPH (see next page).

1953, Wright & Logan.



OCEAN (see next page).

1953, A. & J. Pavia.



LEVIATHAN.

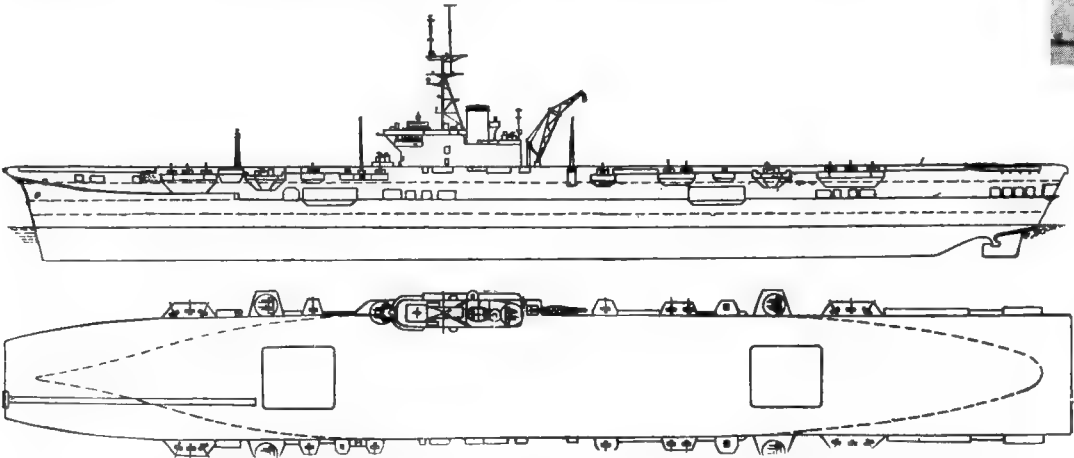
Added 1949, Evening News, Portsmouth.



5 “Glory” Class.

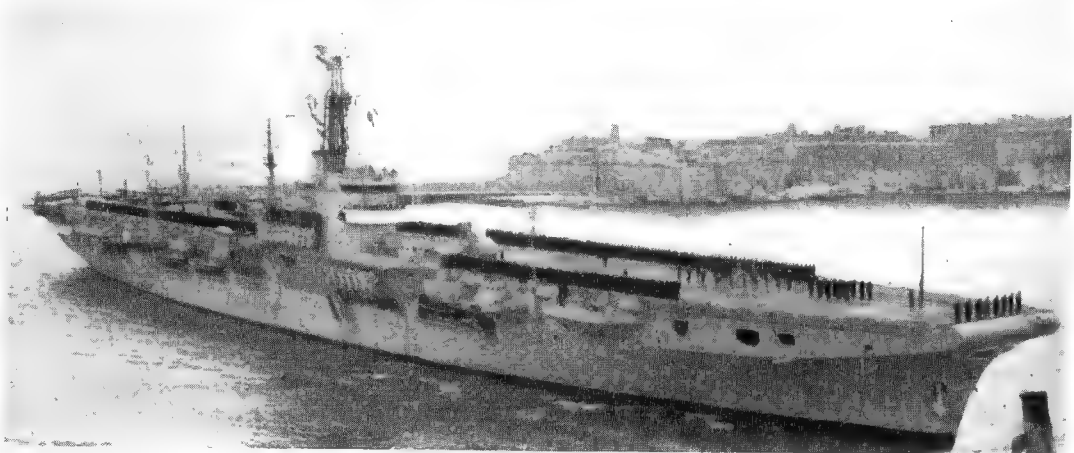
GLORY                      OCEAN                      THESEUS                      TRIUMPH                      WARRIOR

Displacement :      *Glory, Ocean*, 13,190 tons standard (18,040 tons full load)  
                             *Theseus, Triumph, Warrior*, 13,350 tons (18,300 tons full load)  
Dimensions:      Length: 630 (pp.), 695 (o.a.) feet. Beam: 80 feet. Width: 112½ (o.a.) feet, Draught: 21½ (mean), 23½ (max.) feet. Flight deck: 690 feet long, 80 feet wide, 39 feet above water line.  
Guns :                *Theseus and Triumph*, 19—40 mm. AA. Bofors, 24—2 pdr. pompoms, 4—3 pdr. ; *Ocean*, 30—40 mm. Bofors ; *Glory*, 29—40 mm. Bofors AA., 4—3 pdr. (saluting) ; *Warrior*, 28—40 mm. Bofors, 2—3 pdr.  
Aircraft :            35  
Machinery          Parsons geared turbines. 2 shafts. S.H.P. : 42,000 = 25 kts. (24-25 kts. sea speed).  
Boilers :             4 Admiralty 3-drum type (400 lb. working pressure, 700 degrees maximum superheat)  
Complement :      1,076 (peace) (*Glory*) 1,180—130 officers, 1,050 ratings) 1,300 (war)



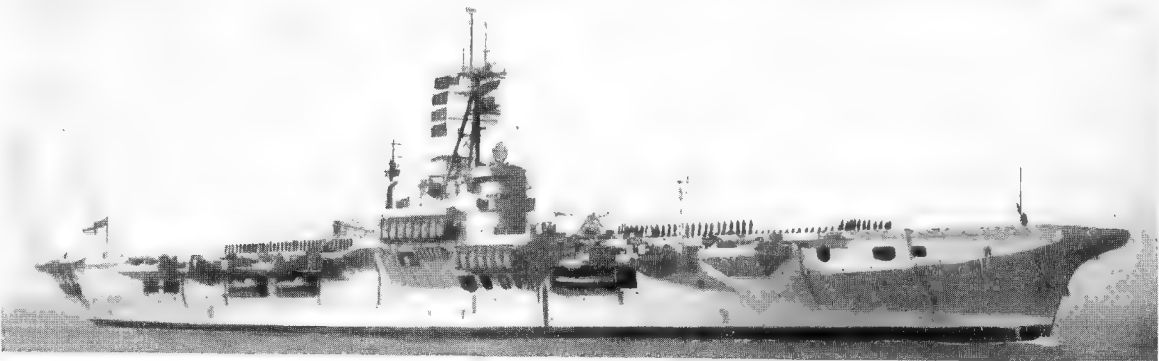
THESEUS.

1954, courtesy Ian S. Pearsall, Esq.



WARRIOR.

1954, A. & J. Pavia.



GLORY

1954, Wright & Logan.

**General Notes.**—All are insulated for tropical service and partially air-conditioned. *Warrior* was modernised 1952-53 with lattice foremast and extended and enlarged bridgework. Accommodation of *Triumph* was modified 1953 to fit her for employment as officer cadet's training ship. *Ocean* and *Theseus* were fitted out for service in the Training Squadron from summer 1954. *Glory* employed as a troop and ferry carrier since autumn 1954.

**Constructional Notes.**—In some of these ships, flight deck is reported to have been strengthened to take aircraft of over 8 tons in weight. Sponsons can be dismantled to the extent of 3½ feet on either side if necessary to allow for passage through Panama Canal. Mercantile type hull. Built to Lloyd's specifications up to main deck with the original intention of converting to commercial service after the war. Damage control : No great measure of vertical sub-division on the sandwich system as it was reckoned that it is better for ships to settle evenly in the event of damage and flooding than to foster capsizing.

**Engineering Notes.**—Engines and boilers are arranged en echelon. In *Theseus*, one propeller is four-bladed and one three-bladed, in order to minimise vibration.

**Experimental Notes.**—*Warrior* was temporarily equipped with a flexible landing deck in 1948-49 for operating jet fighters with skids instead of an under-carriage with wheels, making for safer landings of fast aircraft in limited space. The flexible deck consisted of a rubber sheet supported by air bags. It extended from the bows to the barrier forward of the island and was superimposed on the normal flight deck. After part of the deck was built up to the same level by laying on a light steel structure 2½ feet high.

**Appearance Notes.**—Distinguished from fleet carriers by generally lighter appearance and thin funnel and distinctive shape of ship's side forward.

**Class Notes.**—*Venerable* (renamed *Karel Doorman*) was sold to Netherlands in 1948, *Colossus* (renamed *Arromanches*) was sold to France in 1951 ; and two were completed as maintenance aircraft carriers *Perseus* and *Pioneer*. *Vengeance* was lent to the Royal Australian Navy early in 1953.

Name	Builders	Laid down	Launched	Completed
<i>Glory</i>	Harland & Wolff, Ltd., Belfast	27 Aug. 1942	27 Nov. 1943	22 Apr. 1945
<i>Ocean</i>	Alex. Stephen & Sons, Ltd. Govan	8 Nov. 1942	8 July 1944	30 June 1945
<i>Theseus</i>	Fairfield S.B. & Eng. Co., Ltd. Govan.	6 Jan. 1943	6 July 1944	9 Jan. 1946
<i>Triumph</i>	R. & W. Hawthorn, Leslie & Co., Ltd., Hebburn.	27 Jan. 1943	2 Oct. 1944	9 Apr. 1946
<i>Warrior</i>	Harland & Wolff, Ltd., Belfast.	12 Dec. 1942	20 May 1944	24 Jan. 1946

## GREAT BRITAIN—Battleship

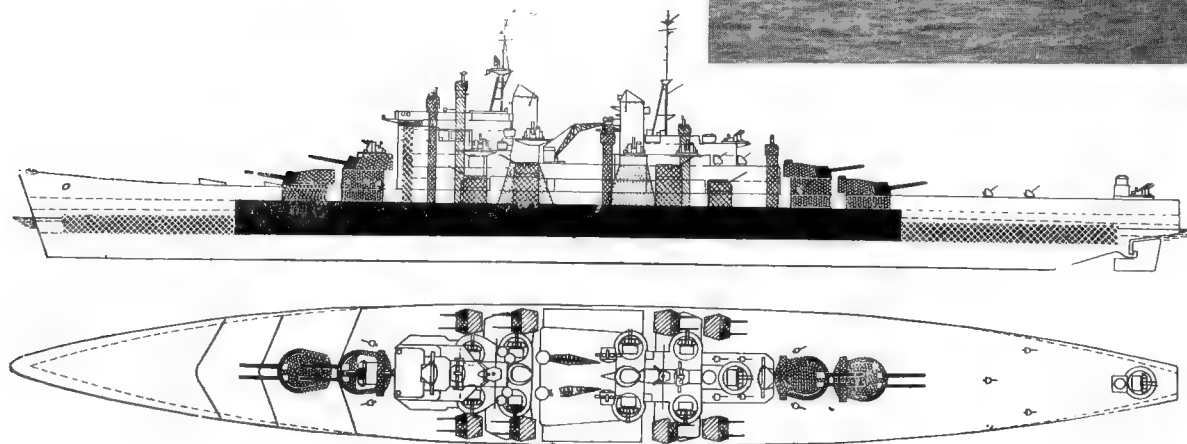
### VANGUARD

Builders : John Brown & Co. Ltd., Clydebank  
 Ordered : 14 Mar. 1941  
 Laid down : 2 Oct. 1941  
 Launched : 30 Nov. 1944  
 Completed : 25 April 1946

Displacement : 44,500 tons standard (51,420 tons full load)  
 Dimensions : Length : 814½ feet (o.a.). Beam : 108½ feet.  
 Draught : 28 feet (mean), 36 feet (max.)  
 Guns : 8—15 inch, 42 cal., 16—5.25 inch,  
 58—40 mm. AA. (Bofors), 4—3 pdr. (saluting)  
 Armour : 14 inch—13 inch sides  
 Machinery : Parsons single reduction geared turbines.  
 4 shafts. S.H.P. : 130,000 = 29.5 kts. sea speed  
 Boilers : 8 Admiralty 3-drum type  
 Complement : 1,600 (peace), 2,000 (war)



1954 Skyfotos.



1954, courtesy Ian S. Pearsall, Esq.

**General Notes.**—Largest warship ever built in Great Britain. Authorised under War Estimates, and designed by Sir Stanley Goodall. Accepted by Admiralty Aug. 9, 1946. Cost £9,000,000, exclusive of 15-inch guns and mountings. Royal Tour to South Africa Feb.-May, 1947. Refitted at Devonport, 1947-48. Operational in Mediterranean Jan.-July, 1949, followed by special trials. From Nov. 1949 was Training Ship at Portland, but temporarily wore flag of Commander-in-Chief, Home Fleet, for autumn cruise 1950 and spring cruise 1951. Flagship of Training Squadron from May 1951. Refit September 1951. Flagship of Home Fleet from spring 1952 to autumn 1954.

**Gunnery Notes.**—Latest system of radar control is installed. The 15-inch guns are those first mounted in H.M.S. *Courageous* and *Glorious* in 1917, and later removed from those ships to be added to reserve of weapons of that calibre maintained for *Hood*, *Queen Elizabeth* and *Royal Sovereign* types. Anti-aircraft equipment finest ever installed in a ship of the Royal Navy. Twin Bofors on "B" turret.

**Engineering Notes.**—Engine-rooms and boiler-rooms are arranged in four self-contained units. Oil burning system is on novel lines. Damage control arrangements claimed to be the most thorough ever installed in H.M. ships. Evaporators can produce 500 tons of fresh water per day. Capacity of dynamos : 17-18,000 amps. Special system of humidity control installed in engine-rooms and boiler-rooms, maintaining even temperature in Arctic or tropics.

**Constructional Notes.**—Water-tight sub-division of hull is so thorough that access to the various compartments can only be gained by vertical shafts. Modern ventilating system. Flared forecastle with three breakwaters. Damage control station is below armour. Admiral's quarters in after superstructure were converted into Royal apartments. Design incorporates five dining halls, cinema, laundry and chapel.



1954, courtesy Ian S. Pearsall, Esq.

# 4 "King George V" Class.

**ANSON** (ex-Jellicoe)

**HOWE** (ex-Beatty)

**DUKE OF YORK** (ex-Anson)

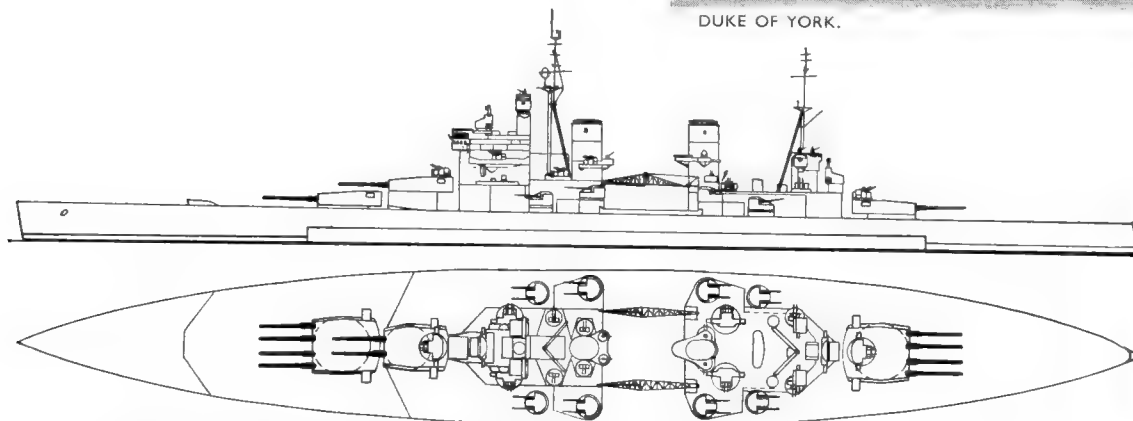
**KING GEORGE V**

Displacement : 35,000 tons standard (45,360 tons full load Anson, 44,790 tons Duke of York, 44,510 tons Howe, 44,460 tons King George V)  
 Dimensions : Length : 739½ (w.l.), 745 (o.a.) feet. Beam : 103 feet.  
 Draught : 27½ feet (mean), 36 feet (max.)  
 Guns : 10—14 inch, 16—5.25 inch, 60 to 64—2 pdr. A.A.,  
 2 to 14—40 mm. AA. (Bofors), 8 to 14—20 mm.  
 AA. (Oerlikon), 4—3 pdr. (saluting)  
 Armour : 16-inch belt (See notes)  
 Machinery : Parsons single reduction geared turbines. 4 shafts.  
 S.H.P. : 112,000 = 28 kts. (have actually developed  
 125,000 = 28.5 kts. in emergency)  
 Boilers : 8 Admiralty 3-drum type  
 Complement : 1,553 to 1,613 (peace), 2,000 (war)



DUKE OF YORK.

Added 1954, Wright & Logan.



**Note to Plan.**—Composite representation. Individual ships vary.

**General Notes.**—Ordered under 1936 (King George V) and 1937 Navy Estimates. Design scope was restricted by limitation of displacement to 35,000 tons by Washington Naval Treaty of 1922. Name of Clydebank ship was changed Dec., 1938, and those of Swan Hunter and Fairfield ships in Feb., 1940. *Prince of Wales* was lost in Dec., 1941. Superstructure abaft bridge, designed as hanger, was used as a cinema. All four ships now in reserve. *Anson*, *Duke of York* and *King George V* are laid up in the Gareloch in a state of preservation.

**Gunnery Notes.**—14-inch guns have an effective range greater than the 15-inch mounted in *Vanguard* and monitors, as measured by the perforation of any given thickness of armour. Elevation of 14-inch guns would appear to be at least 40 degrees.

**Armour Notes.**—Design incorporates enhanced defence against air attack, including better distribution of deck and side armour, more elaborate sub-division, and an improved system of under-water protection. Weight of armour is over 14,000 tons, and water-line thickness is 16 inches. Turret-weights are 1,500 tons for quadruple 14-inch ; 900 tons twin 14-inch ; 80 tons 5.25 inch.

**Engineering Notes.**—Improvements in design reduced boiler weights by about 15 per cent. On trials all 4 ships exceeded 28 kts. easily with about 112,000 S.H.P.

**Appearance Notes.**—Differences are mainly confined to bridge details. Number of small A.A. guns varies in each ship. *Duke of York* has extended platform with S.L., enlarged auxiliary steering position on after funnel. In *Howe* a windscreen is fitted, 2 single 40 mm. mounted on platform. *Anson* has large modern high-angle directors, small platform with S.L. *Anson* and *Duke of York* carry pompoms in large sponsons either side of bridge. *King George V* small platform with S.L.

Name	Builders	Engineers	Laid down	Launched	Completed
King George V	Vickers-Armstrongs, Ltd., (Tyne)	V.-A. (Barrow)	1 Jan. 1937	21 Feb. 1939	11 Dec. 1940
Duke of York	John Brown & Co., Ltd., Clydebank	Clydebank	5 May 1937	28 Feb. 1940	4 Nov. 1941
Anson	Swan, Hunter & Wigham Richardson	Wallsend Co.	20 July 1937	24 Feb. 1940	22 June 1942
Howe	Fairfield S.B. & Eng. Co., Ltd.	Fairfield	1 June 1937	9 Apr. 1940	29 Aug. 1942



KING GEORGE V

Added 1951 Wright & Logan.



HOWE.

Added 1947, Wright & Logan.

GREAT BRITAIN—Ferry Carriers

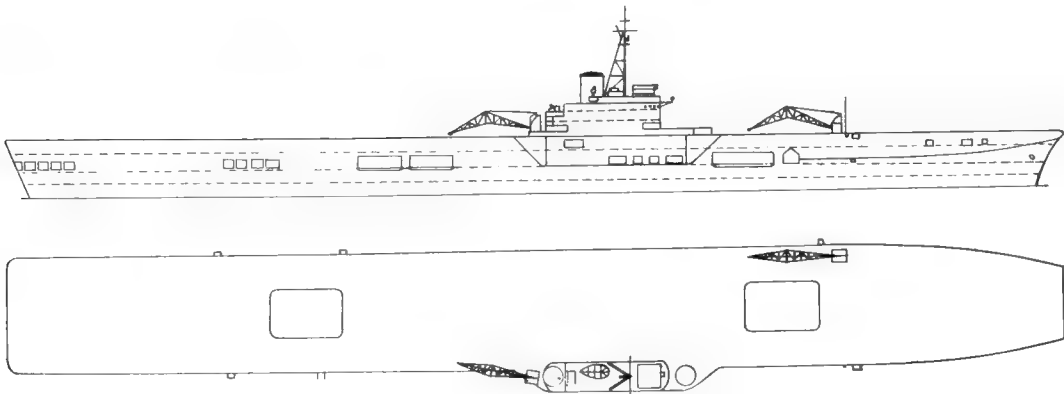


PERSEUS.

1953, J. W. Kennedy.

PERSEUS (ex-Edgar)

Builders :	Vickers-Armstrongs, Tyne
Engineers :	Vickers-Armstrongs, Barrow
Laid down :	1 June, 1942
Launched :	26 Mar., 1944
Completed :	19 Oct., 1945
Displacement :	12,265 tons standard (16,475 tons full load)
Dimensions :	Length: 694½ feet. Beam: 80½ feet. Draught: 23 feet
Guns :	Removed
Armour :	None over flight deck
Machinery :	Parsons geared turbines. 2 shafts. S.H.P. : 42,000 = 25 kts.
Boilers :	4 Admiralty 3-drum type



Note to Plan.—The superstructure on the flight deck aft and abreast the island has now been removed (see photo).

General Notes.—When laid down *Perseus* and *Pioneer* were intended to be additional light carriers of the "Glory" class, but were completed as Aircraft Maintenance Ships, and were apparently modified versions of *Unicorn*. *Perseus* refitted 1950-1951, and equipped with an aircraft catapult of new design, driven by steam from the ship's own boilers, capable of launching heavier and larger types of naval aircraft. Both ships officially redesignated Ferry Carriers June 1953. *Pioneer* due to be scrapped 1954. Ferry carrier *Campania* (ex-escort carrier) latterly rated as aircraft transport, was scrapped in 1954.

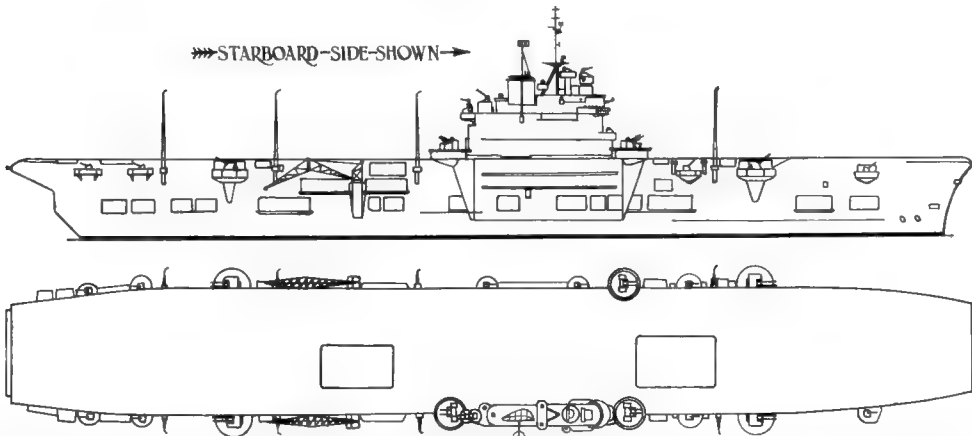


UNICORN.

1951, A. & J. Pavia.

UNICORN

Builders :	Harland and Wolff, Ltd., Belfast
Laid down :	29 June 1939
Launched :	20 Nov. 1941
Completed :	12 Mar. 1943
Displacement :	14,750 tons (20,300 tons full load)
Dimensions :	640 (o.a.) feet. Beam: 90 feet. Draught: 19 feet (mean), 25 feet (max.)
Guns :	8—4 inch, 16—2 pdr. pompoms, 16—20 mm. AA.
Aircraft :	35 (operational, wartime)
Machinery :	Parsons geared turbines. 2 shafts. S.H.P. : 40,000 = 24 kts.
Boilers :	4 Admiralty 3-drum type



Notes.—Built under 1938 Estimates. Is equipped for duty as Aircraft Supply and Repair Ship, having been designed to fulfil for aircraft squadrons much the same duties as undertaken by parent ships for submarine squadrons. Has two large hangars. Served as an operational aircraft carrier during the Second World War. Taken out of reserve 1949 and refitted for further service as a Maintenance and Replenishment Carrier. Sailed for Far East, Sep., 1949, carrying aircraft and spares. Served throughout Korean War June, 1950 to July, 1953, and operated her own aircraft and acted as a spare deck for other aircraft carriers. Officially redesignated as a Ferry Carrier in June, 1953. Returned to United Kingdom (Devonport) in Nov. 1953.



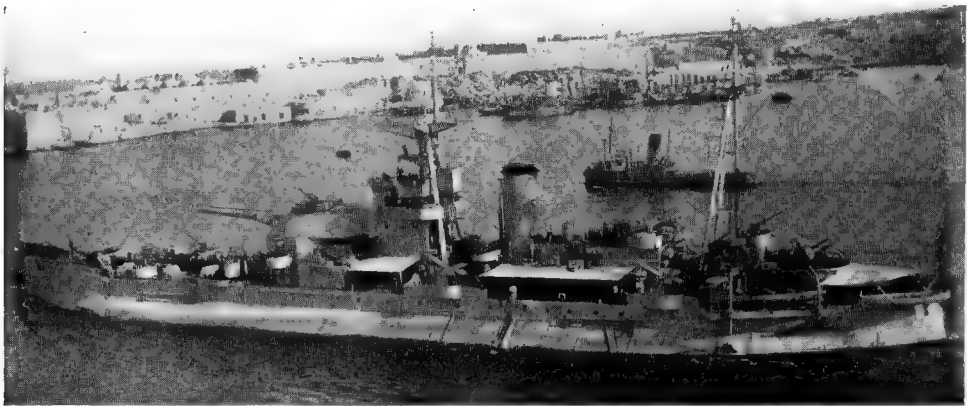
Monitors.

2 "Abercrombie" Class.



ABERCROMBIE.

1951, Wright & Logan.



ROBERTS.

1946, London Studio.

ABERCROMBIE

ROBERTS

Displacement: 8,390 and 7,970 tons, respectively (9,900 and 9,330 tons full load)  
Dimensions: 373½ (o.a.) × 89½ × 11 (mean)  
Guns: 2—15 inch, 42 cal., 8—4 inch, 16—2 pdr., 14—20 mm. AA., (Roberts, 8—40 mm., 8—20 mm.)  
Machinery: Parsons geared turbines. 2 shafts. S.H.P.: 4,800 = 12 kts.  
Boilers: 2 Admiralty 3-drum type

General Notes.—These ships were armed with 15 inch guns formerly mounted in discarded earlier monitors. Both now in reserve.  
Appearance Notes.—The 4 inch AA. guns are a deck higher in Abercrombie than in Roberts. Tripod foremast legs are visible in Roberts

Name	Builders	Laid down	Launched	Completed
Abercrombie	Vickers-Armstrongs, Ltd., Tyne	26 May 1941	31 Mar. 1942	5 May 1943
Roberts	John Brown & Co., Ltd., Clydebank	30 Apr. 1940	1 Feb. 1941	27 Oct. 1941

Cruisers.

3 "Tiger" Class.



DEFENCE.

1952, C. Parsons, Esq.



DEFENCE.

1949, Peter W. McMillan, Esq.

BLAKE (ex-Tiger, ex-Blake)

DEFENCE

TIGER (ex-Bellerophon)

Displacement : 9,550 tons standard (11,700 tons full load)  
Dimensions : Length : 538 (pp.), 555½ (o.a.) feet. Beam : 64 feet. Draught : 21 feet (max)  
Guns : 4—6 inch, 12—3 inch, AA.  
Armour : See notes  
Machinery : Parsons geared turbines. 4 Shafts. S.H.P. : 72,500 = 31.5 kts.  
Boilers : 4 Admiralty 3-drum type  
Complement : 1,000 (as originally designed)

General Notes.—When completed these ships will exceed their originally designed displacement of 8,000 tons. Work on them was stopped in July, 1946. Officially stated that construction work on all three is suspended, but that work in relation to the preparation of equipment is being progressed.

Gunnery Notes.—As originally designed ordnance was same as Superb, but it is officially stated that guns are under review. Final armament and equipment of these ships is dependent on research now in progress.

Torpedo Notes.—Were designed to have 21-inch torpedo tubes in two mountings, similar to Superb.

Armour Notes.—Protection similar to Superb as originally designed.

Class Notes.—Hawke, of this class, laid down at H.M. Dockyard, Portsmouth in Aug., 1944, was cancelled in 1946, as was Bellerophon (ex-Tiger), a cruiser of enlarged design, ordered from Vickers-Armstrongs.

Name	Builders and Engineers	Laid down	Launched	Completion
Blake	Fairfield S.B. & Eng. Co., Ltd., Govan	17 Aug. 1942	20 Dec. 1945	Building
Defence	Scotts S.B. & Eng. Co., Ltd., Greenock	24 June 1942	2 Sep. 1944	Building
Roberts	John Brown & Co., Ltd., Clydebank	1 Oct. 1941	25 Oct. 1945	Building

## GREAT BRITAIN—Cruisers



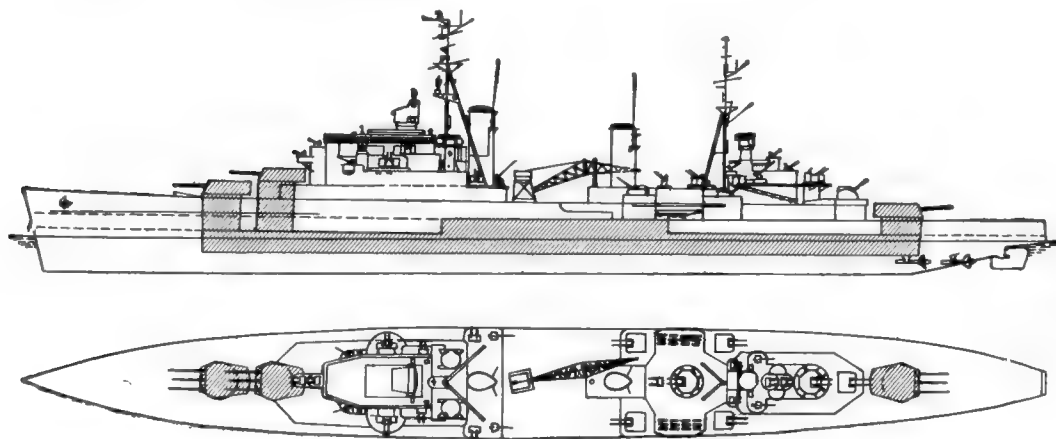
SUPERB.

1954, Wright & Logan.

### SUPERB

Builders : Swan, Hunter & Wigham Richardson, Ltd., Wallsend  
Laid down : 23 June 1942  
Launched : 31 Aug. 1943  
Completed : 16 Nov. 1945

Displacement : 9,000 tons standard (11,560 tons full load)  
Dimensions : Length : 538 (pp.), 555½ (o.a.) feet. Beam : 64 feet. Draught : 21½ (max.) feet  
Guns : 9—6 inch, 10—4 inch AA., 18—2 pdr. pompoms, 4—40 mm. AA.  
Torpedo tubes : 6—21 inch  
Armour : 3"—4" side, 2" turrets and deck  
Machinery : Parsons geared turbines. 4 shafts. S.H.P. : 72,500 = 31.5 kts. (29.25 kts. sea speed)  
Boilers : 4 Admiralty 3-drum type  
Complement : 867 (peace) ; 1,000 (war)



General Notes.—Ordered under War Estimates. Fitted as squadron flagship.

Appearance Notes.—Similar to *Swiftsure*, but has larger high angle directors and two barrage directors before bridge instead of one. Later type directors distinguish her from *Swiftsure*, and no hangar, additional 4-inch H.A. mounting in "X" position, and thinner funnels, from "Mauritius" class.

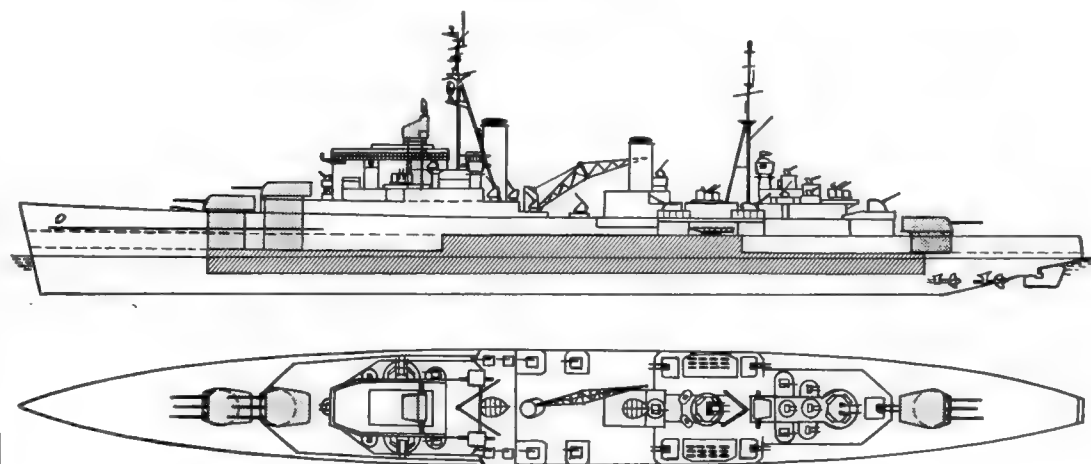


Added 1954, Skyfotos.

### SWIFTSURE

Builders : Vickers-Armstrongs, Ltd., Tyne  
Engineers : Vickers-Armstrongs, Ltd., Barrow  
Laid down : 22 Sept. 1941  
Launched : 4 Feb. 1943  
Completed : 22 June 1944

Displacement : 8,800 tons standard (11,240 tons full load)  
Dimensions : Length : 555½ feet (o.a.). Beam : 63 feet. Draught : 16½ (mean), 21½ (max.) feet  
Guns : 9—6 inch, 10—4 inch AA., 17—40 mm. AA. (four twin, nine single)  
Torpedo tubes : 6—21 inch  
Armour : 4" side, 4" C.T., 2" turrets  
Machinery : Parsons single reduction geared turbines. 4 shafts. S.H.P. : 72,500 = 31.5 kts.  
Boilers : 4 Admiralty 3-drum type  
Complement : 855 (peace), 960 (war)



General Notes.—Slightly modified version of the *Ceylon*. *Ontario*, of same type, was given to the Royal Canadian Navy.

Appearance Notes.—No provision ever made for aircraft, the absence of the hangar structure and the additional pair of 4-inch AA. in "X" position distinguish her from "Mauritius" class.

2 "Ceylon" Class.



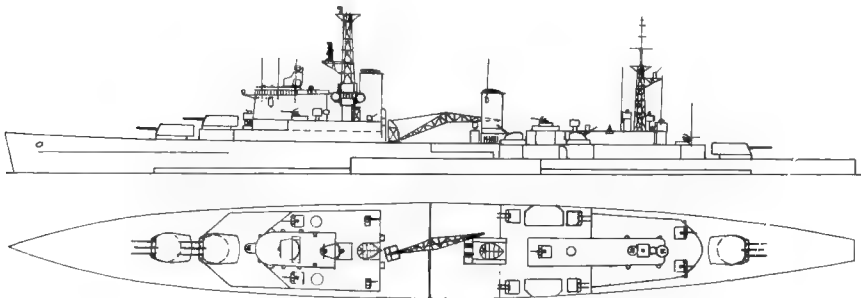
NEWFOUNDLAND

Added 1954.

CEYLON

Displacement : 8,800 tons (11,125 tons full load) ; Ceylon 8,781 tons (11,110 tons full load)  
Dimensions : Length : 549 (w.l.), 555½ (o.a.) feet. Beam : 62 feet. Draught : 16½ (mean), 20½ (max.) feet  
Guns : 9—6 inch, 8—4 inch AA., 12—40 mm., 12—20 mm. AA. (Ceylon 2—40 mm., 16—20 mm.)  
Tubes : 6—21 inch  
Armour : 4" side, 4" C.T., 2" turrets, 2" deck.  
Machinery : Parsons single-reduction geared turbines. 4 shafts. S.H.P. : 72,500 = 31.5 kts  
Boilers : 4 Admiralty 3-drum type  
Complement : 766 Ceylon, 808 Newfoundland (peace) ; 950 (war)

NEWFOUNDLAND

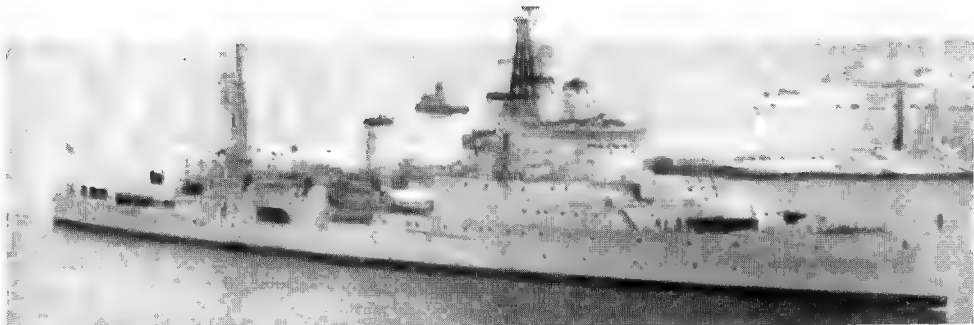


Note to Plan.—Represents Newfoundland only. Ceylon has light tripod masts.

General Notes.—Built under 1938 and 1939 Navy Estimates, respectively, and ordered in 1939. These ships are a modification of original Fiji design, one 6-inch turret having been suppressed, and the number of light AA. guns augmented. Newfoundland was reconstructed at H.M. Dockyard, Devonport with two lattice masts, new bridge and improved AA. armament. Uganda of this class was given to the Royal Canadian Navy in 1944 and renamed Quebec in 1951.

Appearance Notes.—As compared with "Mauritius" class, Ceylon has oval instead of rounded bridge, high-angle director abreast foremast instead of further forward abreast D.C.T. Newfoundland has new H.A. director mounted on either side of bridge, same type as in later "C" class and "Battle" class destroyers.

Name	Builders	Engineers	Laid down	Launched	Completed
Ceylon	Alex. Stephen & Sons, Ltd., Govan	Stephen Wallsend	27 Apr. 1939	30 July 1942	13 July 1943
Newfoundland	Swan, Hunter and Wigham Richardson	Wallsend	9 Nov. 1939	19 Dec. 1941	31 Dec. 1942



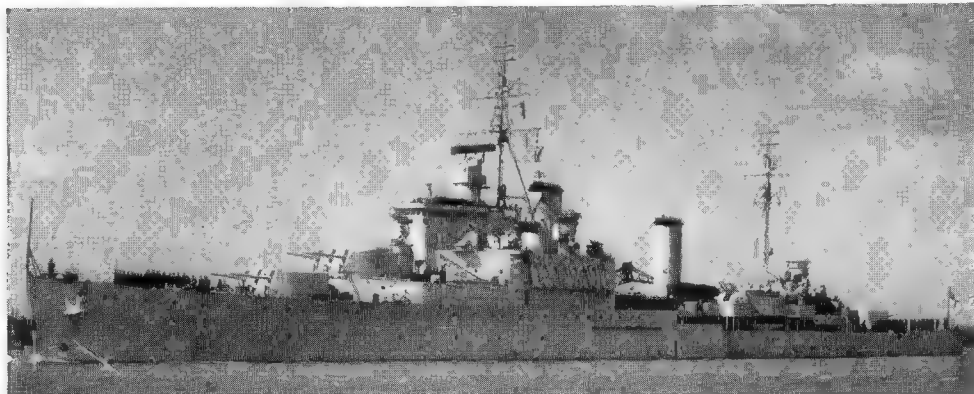
NEWFOUNDLAND.

1953, A. & J. Pavia.



CEYLON.

1951 A. & J. Pavia



CEYLON.

1950, Wright & Logan.

GREAT BRITAIN—Cruisers

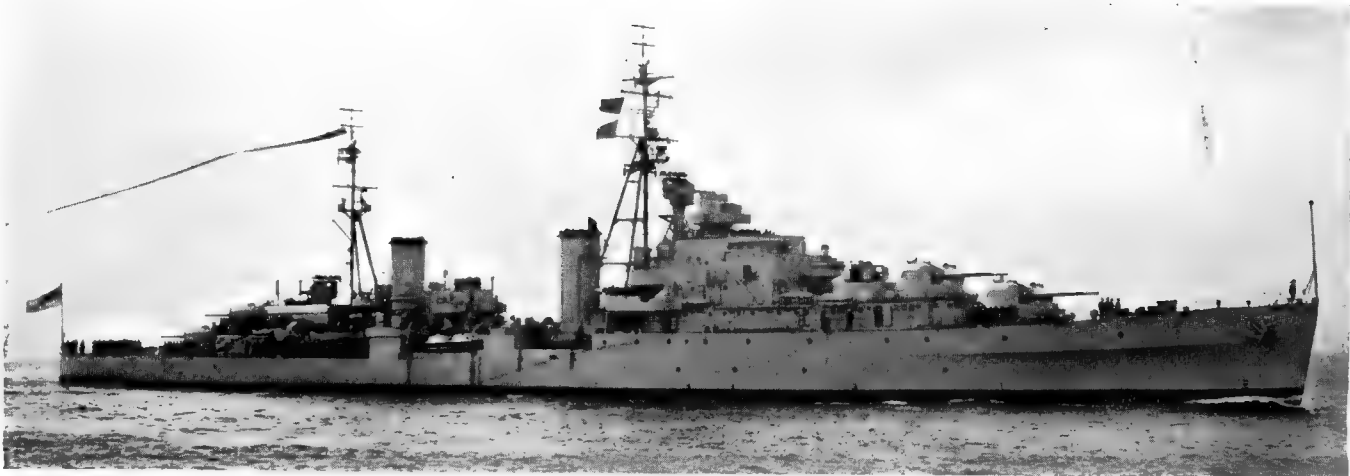
2 Modified “ Dido ” Class.

DIADEM

Displacement :  
Dimensions :  
Guns :  
Tubes :  
Armour :  
Machinery :  
Boilers :  
Complement

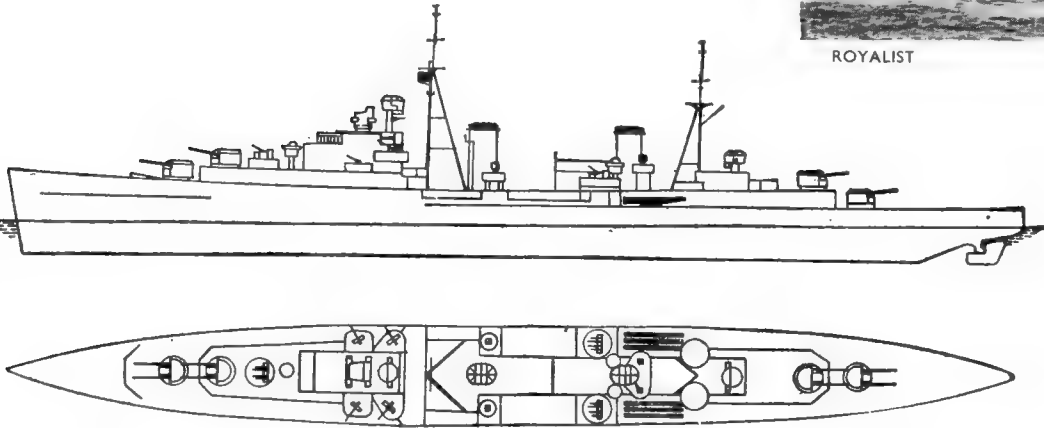
ROYALIST

5,900 tons (7,560 and 7,360 tons full load respectively)  
Length : 512 feet (o.a.). Beam : 50½ feet. Draught : 15 (mean).  
18½ (max.) feet  
8—5.25 inch, 12—2 pdr. AA., 12—40 mm. AA., 12—20 mm. AA.  
6—21 inch (tripled) (none at present in *Royalist*)  
2”—1” turrets, 2” side  
Parsons single-reduction geared turbines. 4 shafts. S.H.P.  
62,000 = 32 kts.  
4 Admiralty 3-drum type  
588 (peace)



ROYALIST

1946, Wright & Logan.



General Notes.—Built under War Estimates. *Bellona* and *Black Prince* of this class are on loan to Royal New Zealand Navy. War loss : *Spartan*.

Appearance Notes.—These 2 ships are easily distinguishable from earlier units of “ Dido ” class by absence of rake to masts and funnels.

Name	Builders and Engineers	Laid down	Launched	Completed
<i>Diadem</i>	R. & W. Hawthorn, Leslie & Co., Ltd., Hebburn	15 Nov. 1939	26 Aug. 1942	6 Jan. 1944
<i>Royalist</i>	Scotts S. B. & Eng. Co., Ltd., Greenock	21 Mar. 1940	30 May 1942	10 Sep. 1943



DIADEM

1949, P. A. Vicary.



6 “Dido” Class.

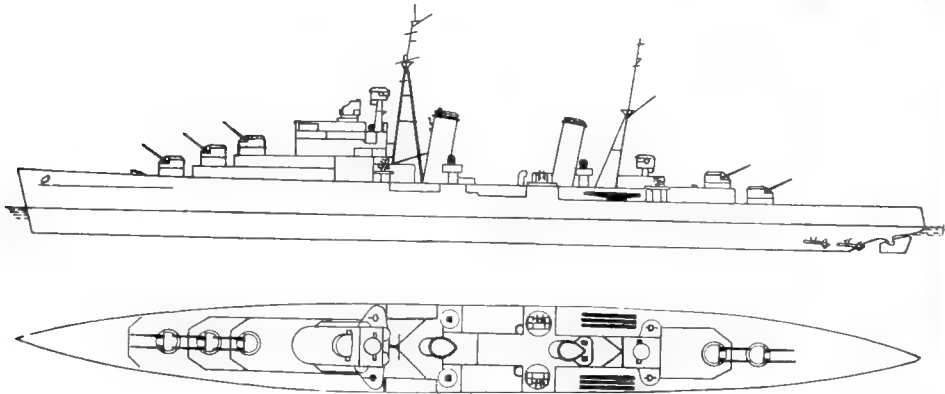
ARGONAUT	DIDO	PHOEBE
CLEOPATRA	EURYALUS	SIRIUS

Displacement : 5,770 tons standard ; *Cleopatra* 5,772 tons and *Sirius* 5,807 tons (7,120 to 7,515 tons full load)  
Dimensions : Length : 506 (pp.), 512 (o.a.) feet. Beam : 50½ feet (*Argonaut* 50 feet). Draught : 14 (mean), 18 (max.) feet.  
Guns : 8—5.25 inch (*Dido*, *Sirius*, 10—5.25 inch), 2 to 12—40 mm., 4 to 13—20 mm. AA., 8 to 12—2 pdr.  
Tubes : 6—21 inch (tripled) ; none in *Phoebe*  
Armour : 2”-1” turrets, 2” side  
Machinery : Parsons single-reduction geared turbines. 4 shafts. S.H.P. : 64,000 = 32.25 kts.  
Boilers : 4 Admiralty 3-drum type, working pressure 400 lb.  
Complement : 550-620 (peace)



CLEOPATRA

Added 1954, Skyfotos.



Note to Plan.—Only *Dido* and *Sirius* have 5 turrets as shown here.

General Notes.—As designed, displacement was 5,450 tons, but actual figures exceeded this considerably. *Argonaut*, *Dido* and *Sirius* are in reserve. In 1943 *Argonaut* was so extensively damaged by torpedoes that she had to be one-third rebuilt at Philadelphia. *Scylla* was discarded in 1948 on account of heavy underwater damage sustained during war, then was used for ship target trials, and finally broken up in 1950. War losses : *Bonaventure*, *Charybdis*, *Hermione*, *Naiad*.

Appearance Notes.—Distinguished from modified “Dido” class by higher bridge and raking funnels. *Dido* and *Sirius* retain third turret forward in “Q” position.

Gunnery Notes.—*Cleopatra* has new outfit of Bofors with British mountings instead of United States mountings (10—40 mm.) ; single each side in bridge sponsons and abreast forefunnel, twin in “Q” position and athwart after funnel.

Est.	Name	Builders	Machinery	Ordered	Laid down	Launched	Completed
1936	<i>Dido</i>	Cammell Laird	Cammell Laird	21 Mar. 1937	20 Oct. 1937	18 July 1939	30 Sep. 1940
1936	<i>Euryalus</i>	Chatham	Hawthorn	21 Mar. 1937	20 Oct. 1937	6 June 1939	30 June 1941
1936	<i>Phoebe</i>	Fairfield	Fairfield	21 Mar. 1937	2 Sep. 1937	25 Mar. 1939	30 Sep. 1940
1936	<i>Sirius</i>	Portsmouth	Scotts	21 Mar. 1937	6 Apr. 1938	18 Sep. 1940	6 May 1942
1938	<i>Cleopatra</i>	Hawthorn	Hawthorn	18 Aug. 1938	5 Jan. 1939	27 Mar. 1940	20 Nov. 1941
1939	<i>Argonaut</i>	Cammell Laird	Cammell Laird	1939	21 Nov. 1939	6 Sep. 1941	8 Aug. 1942



DIDO (*SIRIUS* similar.) Five twin turrets.

1954, Wright & Logan.



PHOEBE.

1953 Pembroke Studios.

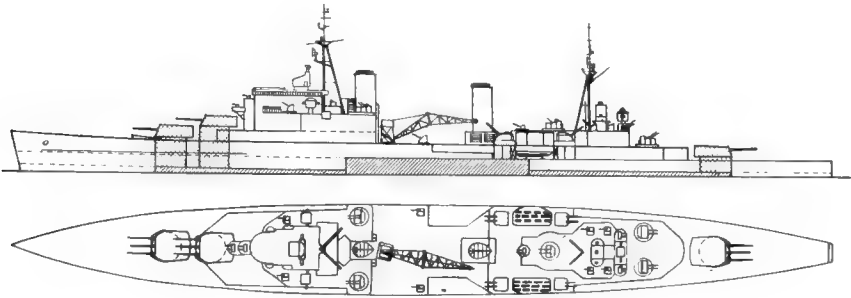
GREAT BRITAIN—Cruisers

5 " Mauritius " Class.

BERMUDA  
GAMBIA  
JAMAICA

KENYA  
MAURITIUS

Displacement : 8,000 tons standard (11,000 to 11,270 tons full load)  
Dimensions : Length : 549 (w.l.), 555½ (o.a.) feet. Beam : 62 feet. Draught : 16½ (mean) 21 (max.) feet  
Guns : Bermuda : 9—6 inch, 8—4 inch AA., 20—2 pdr. AA., (5 quadruple)  
Gambia : 9—6 inch, 8—4 inch AA., 12—40 mm. AA. (5 twin, 2 single)  
Jamaica : 9—6 inch, 8—4 inch AA., 8—40 mm. AA., 24—2 pdr. (6 quadruple)  
Kenya : 9—6 inch, 8—4 inch AA., 16—40 mm. AA. (5 twin, 6 single)  
Mauritius : 9—6 inch, 8—4 inch AA., 6—40 mm. AA., 20—2 pdr. (5 quadruple)  
Tubes : 6—21 inch  
Armour : 4½" 3" side, 4" C.T., 2" turrets, 2" deck  
Machinery : Parsons geared turbines. 4 shafts. S.H.P. : 72,500 = 31.5 kts. (sea speed 29.75 kts. except Kenya, 30.25 kts).  
Boilers : 4 Admiralty 3-drum type  
Complement : 730 (peace) ; 980 (war)



GAMBIA.

1954, Wright & Logan.



JAMAICA

1954, Wright & Logan



BERMUDA

1954, A. & J. Pavia.

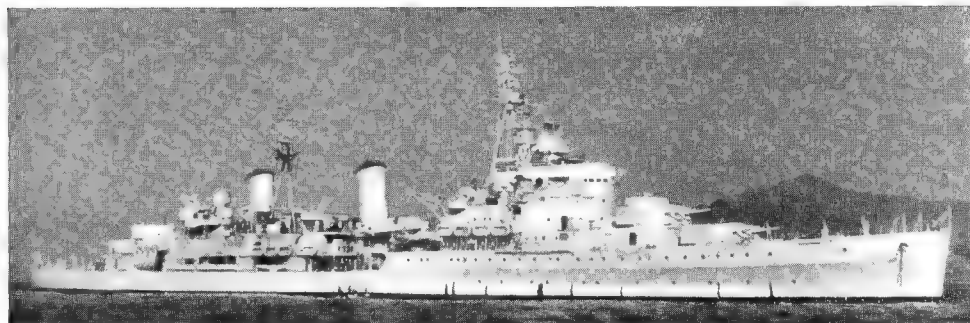
General Notes.—These ships are a logical development from " Southampton " and improved " Southampton " designs, and are reported to have proved highly successful in service. Two others, *Fiji* and *Trinidad*, were lost in action during the Second World War. *Nigeria*, the only one of the class which retains a fourth triple 6-inch turret in " X " position, was sold to the Indian Navy in 1954.

Gunnery Notes.—Different type of light anti-aircraft guns in *Gambia*. In all ships light AA. armament differs in number, type, and disposition (see data above and photos.).

Appearance Notes.—*Jamaica* has a stump mast for supporting aircraft homing beacon, installed before after funnel on starboard side (see photo).

Est.	Name	Builders	Engineers	Ordered	Laid Down	Launched	Completed
1937	<i>Kenya</i>	Stephen	Stephen	Dec. 1937	18 June 1938	18 Aug. 1939	28 Aug. 1940
1937	<i>Mauritius</i>	Swan Hunter	Wallsend Slipway	Dec. 1937	31 Mar. 1938	19 July 1939	14 Dec. 1940
1938	<i>Gambia</i>	Swan Hunter	Wallsend Slipway	1939	24 July 1939	30 Nov. 1940	21 Feb. 1942
1938	<i>Jamaica</i>	V.-A., Barrow	V.-A., Barrow	1939	28 Apr. 1939	16 Nov. 1940	29 June 1942
1939	<i>Bermuda</i>	Clydebank	Clydebap	1939	30 Nov. 1939	11 Sep. 1941	5 Aug. 1942

## I Improved "Southampton" Class.

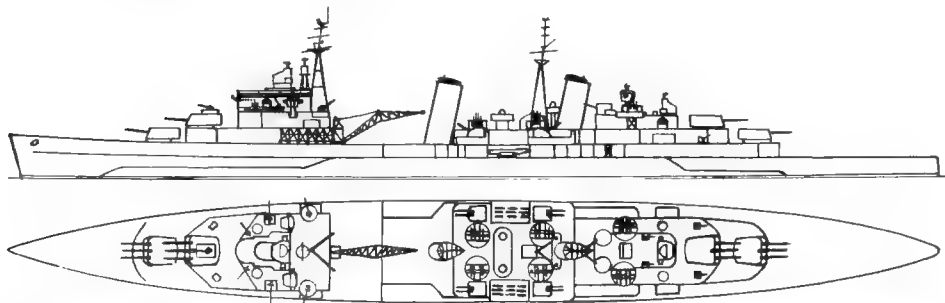


BELFAST.

Lieut. A. W. Sugden, R.N.

## BELFAST

<i>Builders :</i>	Harland & Wolff, Ltd., Belfast
<i>Laid down :</i>	10 Dec. 1936
<i>Launched :</i>	17 Mar. 1938
<i>Completed :</i>	3 Aug. 1939
<i>Displacement :</i>	11,550 tons (15,000 tons <i>full load</i> )
<i>Dimensions :</i>	Length : 579 (pp.), 613½ (o.a.) feet. Beam: 66½ feet. Draught : 17 feet (23 feet <i>max.</i> )
<i>Guns :</i>	12—6 inch, 8—4 inch AA., 32—2 pdr. pompoms, 9—40 mm. AA.
<i>Tubes :</i>	6—21 inch (tripled)
<i>Armour :</i>	5"—3" side, 4" C.T., 2½" turrets
<i>Machinery :</i>	Parsons geared turbines. 4 shafts. S.H.P. : 80,000 = 32.5 kts.
<i>Boilers :</i>	4 Admiralty 3-drum type
<i>Complement :</i>	847 (peace)



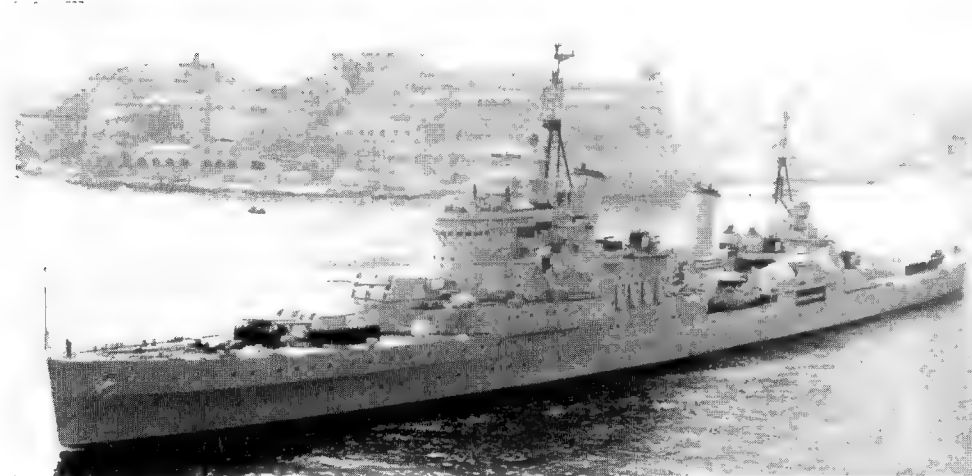
**General Notes.**—Improved "Southampton" type. The largest cruiser in the Royal Navy. Designed displacement was 10,000 tons with beam of 63½ feet, since increased. Built under 1936 Estimates. Internal subdivision is exceptionally complete. Was practically rebuilt after being heavily damaged by a mine in early months of war, beam being increased and other alterations made. Sister ship *Edinburgh* lost in action, 1942.

**Armour Notes.**—Reported to be designed to withstand 8-inch shell-fire. Armour extends over entire length of citadel, and protective deck right across ship's breadth above magazines.

**Reconstruction Notes.**—When she was mined her back was broken, and in the course of repairs, to strengthen her, she was fitted with an external bulge adding approximately 2½ feet to her beam. This bulge roughly covers the same areas as the armour belt above the water line and can be seen in the photograph. Besides providing additional under-water protection, it has improved the ship's stability, thereby enabling her to retain her entire 6-inch armament despite extra top weight having been added ; but all these modifications have reduced her maximum speed by about two knots.

**Gunnery Notes.**—The light anti-aircraft armament comprises two 8-barrelled 2 pdr., four 4 barrelled-2 pdr., and nine single 40 mm.

## I Later "Southampton" Class.

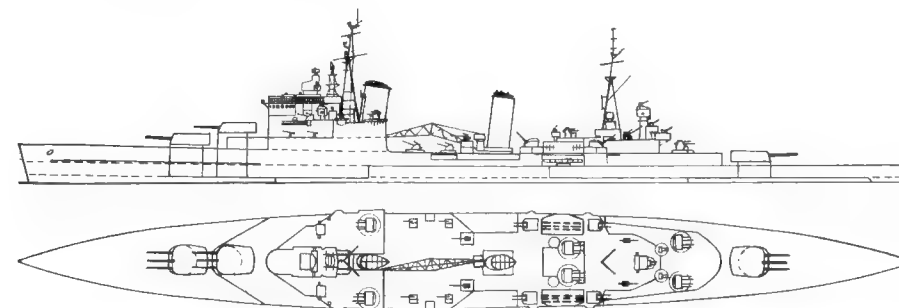


LIVERPOOL.

1952, A. &amp; J. Pavia.

## LIVERPOOL

<i>Builders</i>	Fairfield Shipbuilding & Engineering Co., Ltd., Govan
<i>Laid down :</i>	17 Feb. 1936
<i>Launched :</i>	24 Mar. 1937
<i>Completed :</i>	25 Oct. 1938
<i>Displacement</i>	9,400 tons <i>standard</i> 12,680 tons ( <i>full load</i> )
<i>Dimensions :</i>	Length : 592 (o.a.) feet. Beam : 62½ feet. Draught : 17½ ( <i>mean</i> ), 22 ( <i>max.</i> ) feet
<i>Guns :</i>	9—6 inch, 8—4 inch, 26—2 pdr. pompoms, 2—40 mm. Bofors.
<i>Tubes :</i>	6—21 inch (tripled)
<i>Armour :</i>	4" side, 4" C.T., 2" turrets
<i>Machinery :</i>	Parsons geared turbines. 4 shafts. S.H.P. : 82,500 = 32.3 kts.
<i>Boilers :</i>	4 Admiralty 3-drum type
<i>Oil fuel :</i>	2,000 tons
<i>Complement :</i>	850

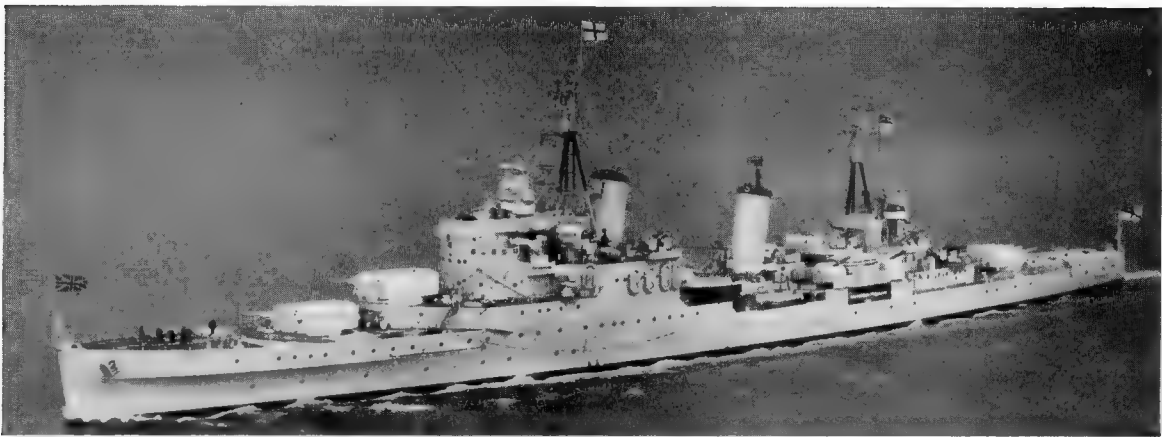


**General Notes.**—Slightly enlarged and modified "Southampton" type. Authorised under 1935 Estimates. Ordered March 1935. Engined by Fairfield. Bridge structure extends a considerable distance aft, enveloping fore-funnel and incorporating what were originally aircraft hangars, subsequently used as a cinema, offices, etc. War losses : *Gloucester. Manchester.*

**Appearance Notes.**—Has rounded bridge front as in *Belfast* and "Mauritius" class.

GREAT BRITAIN—Cruisers

4 "Newcastle" ("Southampton") Class.

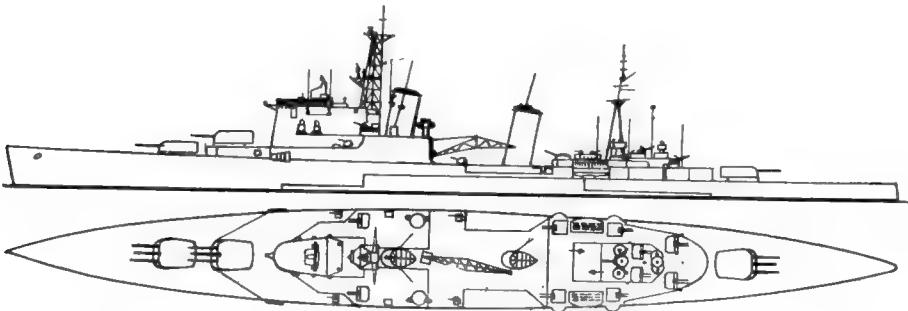


GLASGOW

1954, Skyfotos.

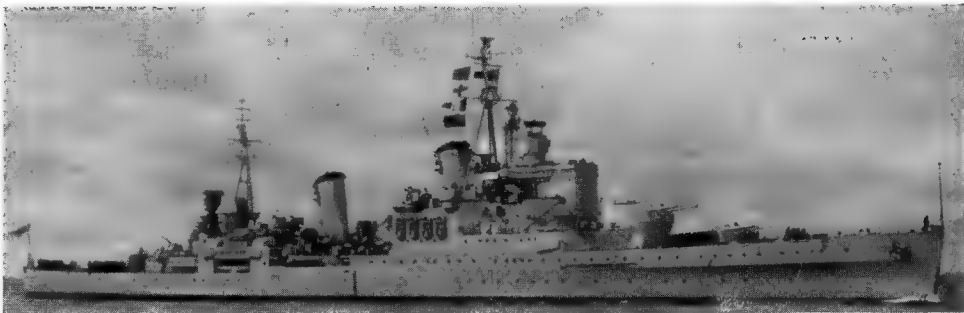
BIRMINGHAM      GLASGOW      NEWCASTLE (ex-Minotaur)      SHEFFIELD

Displacement : 9,100 tons standard (12,100 tons Newcastle, 12,180 tons Birmingham, 12,400 tons other two full load)  
Dimensions : Length : 558 (pp.), 584 (w.l.), 591½ (o.a.) feet. Beam : 61½ feet. Draught : 17 (mean), 20 (max.), feet.  
Guns : Glasgow and Sheffield 9—6 inch, 8—4 inch AA., 8—2 pdr. pompoms, 8—40 mm. AA. Birmingham and Newcastle 9—6 inch, 8—4 inch AA., 18—40 mm. AA.  
Tubes : 6—21 inch (tripled)  
Armour : 4"—3" side, 4" C.T., 2"—1" turrets, 2" deck  
Machinery : Parsons geared turbines, 4 shafts. S.H.P. : 75,000 = 32 kts.  
Boilers : 4 Admiralty 3-drum type  
Oil fuel : 1,970 tons  
Complement : 717-833 (peace)



Note to Plan.—Drawing represents Birmingham and Newcastle after reconstruction. For Glasgow and Sheffield see photos.

General Notes.—Built under 1933 (Newcastle) and 1934 Navy Estimates. Centre gun of each turret is mounted slightly further back than other two. Protection is somewhat better than in previous classes. In all ships of class, special ventilating trunks have been installed, with openings on either side of hull at break of deck level abreast of "B" turret. War loss : Southampton.



SHEFFIELD

1954, Wright & Logan.



BIRMINGHAM

1952, Wright & Logan.



NEWCASTLE

1952, Abrahams.

Gunnery Notes.—New 4 inch directors abreast forefunnel in Birmingham and Newcastle.

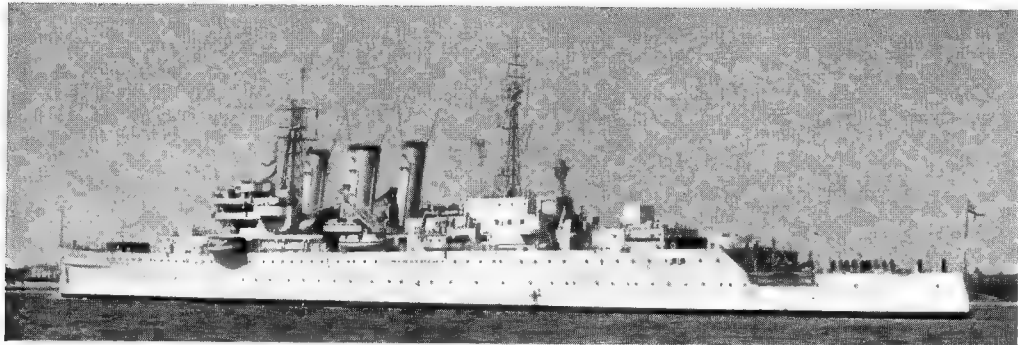
Appearance Notes.—Longer than Mauritius and Superb types with raked funnels and former hangar structure. Birmingham differs from remainder of class in having plain bow without knuckle. Glasgow has aircraft homing beacon on starboard side abaft after funnel which distinguishes her from Sheffield. Lattice foremast and round bridge in Birmingham and Newcastle.

Reconstruction Notes.—Birmingham and Newcastle extensively reconstructed and modernised, 1950-52, modifications including new bridge structure rebuilt with round front, revised armament arrangements and air conditioning. New lattice foremast, but tripod mainmast retained. Sheffield underwent long refit 1949-51, but was not so drastically modified as regards appearance (see photo). Glasgow refit 1950-51.

Name	Builders	Engineers	Ordered	Laid down	Launched	Completed
Birmingham	H.M. Dockyard, Devonport	Clydebank	1 Mar. 1935	18 July 1935	1 Sep. 1936	18 Nov. 1937
Glasgow	Scotts S.B. & Eng. Co. Ltd.	Scotts	17 Dec. 1934	16 Apr. 1935	20 June 1936	8 Sep. 1937
Newcastle	Vickers-Armstrongs, Ltd., Tyne	V.-A., Barrow	1 June 1934	4 Oct. 1934	23 Jan. 1936	5 Mar. 1937
Sheffield	Vickers-Armstrongs, Ltd., Tyne	V.-A., Barrow	17 Dec. 1934	31 Jan. 1935	23 July 1936	25 Aug. 1937



Trials Cruiser.



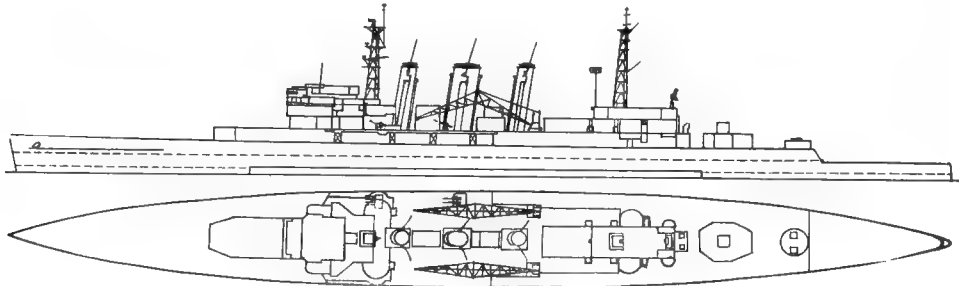
CUMBERLAND.

1951, Wright & Logan.

CUMBERLAND

Builders : Vickers, Ltd., Barrow  
Engineers : Vickers, Ltd., Barrow  
Laid down : 18 Oct. 1924  
Launched : 16 Mar. 1926  
Completed : Jan. 1928

Displacement : 10,000 tons (13,540 tons full load)  
Dimensions : 590 (pp.), 630 (o.a.) feet. Beam : 68½ feet. Draught : 16½ feet (mean)  
Guns : 2—4.5 inch (on forecastle and abreast forefunnel, both starboard), 2—40 mm. AA.  
Armament varies from time to time (see notes)  
Tubes : 1—21 inch (on stern)  
Armour : 5"—3" side at w.l., 4" deck over vitals, 2"—1½" gun houses, 3" C.T.  
Machinery : Parsons geared turbines. 4 shafts. Designed S.H.P. : 80,000 = 31.5 kts.  
Boilers : 8 Admiralty 3-drum type, with superheaters (250 lb. working pressure)  
Oil fuel : 3,400 tons  
Radius : At full speed : 2,300 miles ; at economical speed (11-14 kts.) : 10,400 miles  
Complement : 679



**General Notes.**—Originally a heavy cruiser of the "County" class with a main armament of 8—8 inch guns. This ship was converted into the Royal Navy's first trials cruiser for the testing of anti-aircraft guns, torpedoes and guided missiles. Denny-Brown fin stabilisers are fitted to prevent rolling and assist in accuracy of fire control. This is the first large ship to be so equipped. Taken in hand for conversion 1949 and completed in May 1951 as a radar and radio experimental ship with much reduced armament, new directors, increased accommodation for experimental personnel and cage masts of medium height.

**Previous Conversion Notes.**—This ship was reconstructed during 1935-38, alterations including removal of torpedo tubes, increased armour protection, and modernisation of the anti-aircraft armament. To compensate for the additional weight so imposed, she was cut down by one deck aft. She had large after superstructure before the mainmast, subsequently removed.

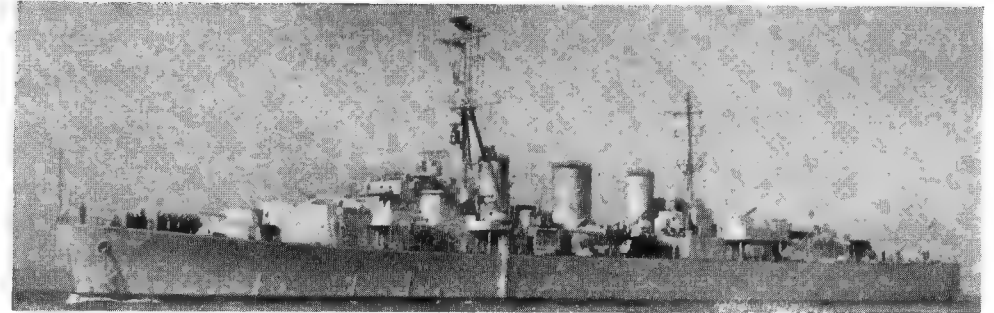
**Armour Notes.**—No side armour was included in original design, protection being afforded by a 3 inch—1½ inch deck. External bulges are fitted and the internal subdivision is particularly well planned.

**Gunnery Notes.**—After conversion was first armed with 2—4.5 inch guns and 4—40 mm. Bofors AA., but since fitted with further new weapons for trials. Barbette of "B" 8-inch gun turret remains. "Battle" type director on the upper starboard bridge wing. Small radar scanner of "cheese-cutter" variety mounted on bridge. Small lattice tower aft in "X" position.

Trials Cruiser, Fast Minelayers—GREAT BRITAIN

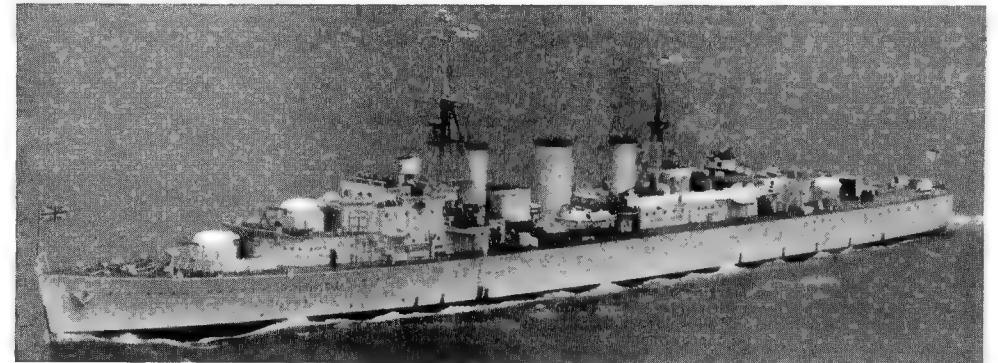
Fast Minelayers.

3 "Manxman" Class.



APOLLO.

1954, Wright & Logan.



MANXMAN.

1954, Skyfotos.

APOLLO

Displacement : 2,650 tons (4,000 tons full load)  
Dimensions : 418 (o.a.) × 40 × 11½ feet (16 feet max.)  
Guns : Apollo, 4—4 inch, 10—40 mm. AA., 2—20 mm. AA. ; Ariadne, 4—4 inch, 11—40 mm. AA.  
Mines : Manxman, 6—4 inch, 6—40 mm. AA.  
Machinery : 100  
Parsons geared turbines. 2 shafts. S.H.P. : 72,000 = 40 kts. designed max. (sea speed less)  
Complement : 242-246 (peace)

ARIADNE

MANXMAN

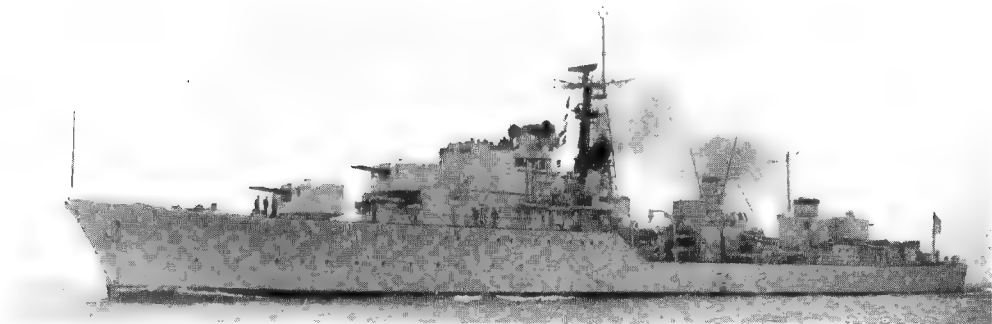
**General Notes.**—Manxman built under 1938 Estimates ; others are war construction. Former ship was torpedoed by an enemy submarine and badly damaged, Nov. 1942. War losses of this type : Abdiel, Latona, Welshman, all 1938 Programme.

**Appearance Notes.**—Ariadne is similar to Apollo, but armament of Manxman differs considerably.

Name	Builders and Engineers	Laid down	Launched	Completed
Apollo	R. & W. Hawthorn, Leslie & Co. Ltd., Hebburn	10 Oct. 1941	5 Apr. 1943	12 Feb. 1944
Ariadne	Alex. Stephen & Sons, Ltd., Glasgow	15 Nov. 1941	16 Feb. 1943	9 Oct. 1943
Manxman	Alex. Stephen & Sons, Ltd., Glasgow	24 Mar. 1939	5 Sep. 1940	20 June 1941

GREAT BRITAIN—Ex-Destroyers

(All fitted as Leaders).  
8 “Daring” Class.



DUCHESS.

1953, Wright & Logan.

DAINTY	DECOY (ex-Dragon)	DELIGHT (ex-Disdain, ex-Ypres)	DIANA (ex-Druid)
DARING	DEFENDER (ex-Dogstar)	DIAMOND	DUCHESS
	Displacement :	2,610 tons (3,500 to 3,700 tons full load)	
	Dimensions :	366 (bp.), 390 (o.a.) × 43 × 12½ feet (max.)	
	Guns :	6—4.5 inch, in twin turrets, two forward and one aft, 6—40 mm. AA.	
	Tubes :	10—2.1 inch, in two pentad mountings	
	A/S weapons :	Squid	
	Machinery :	Parsons double reduction geared turbines. English Electric Co. design in Yarrow ships. 2 shafts. S.H.P. : 54,000 = 34.75 kts.	
	Boilers :	Foster-Wheeler in Dainty, Defender, Diamond, Duchess and another, Babcock in remaining three.	
	Complement :	308 (Daring and Diamond as leaders), 297 Diana, 295 Decoy and Delight, 278 (others)	

**General Notes.**—Known as destroyers until 1953 when they were officially categorised as “Daring Class ships” They can equally perform a number of roles satisfactorily. In many respects they can carry out the functions of cruiser reconnaissance, and they can also act as excellent anti-submarine or anti-ship craft. All are fitted as leaders. These ships, which are largely experimental, constitute an expansion and merging of the “Weapon” and “Battle” designs with increased armament, and were the largest destroyers ever built for the Royal Navy. They almost fall into the light cruiser category, especially as they have the typical cruiser gun turret disposition. Of all-welded hull construction, they incorporate features based on lessons learned during the Second World War, as well as all the improvements devised since although the basic plan was a war-time design intended to be used against the Japanese. They represent the most ingenious type and the most comprehensive light warship class ever built for the Admiralty. Special arrangements were made to ensure that habitability and layout of accommodation are the best possible. They have the finest anti-aircraft and anti-submarine systems devised. Cost £2,047,000 to £2,880,000 each

**Gunnery Notes.**—The 4.5 inch turrets are of a new type, fully automatic and radar controlled. The 40 mm. twin mountings abreast c.t. are also fully automatic and radar controlled. The 40 mm. twin mounting abaft second (visible) funnel is semi-automatic.

**Engineering Notes.**—The main propelling machinery is of advanced design developed by PAMETRADA (Parsons and Marine Engineering Turbine Research and Development Association) and manufactured by Wallsend Slipway & Engineering Co., Ltd., in Daring and by builders in others. The steam conditions are the highest yet used in ships of the Royal Navy and the boilers are designed for superheat control.

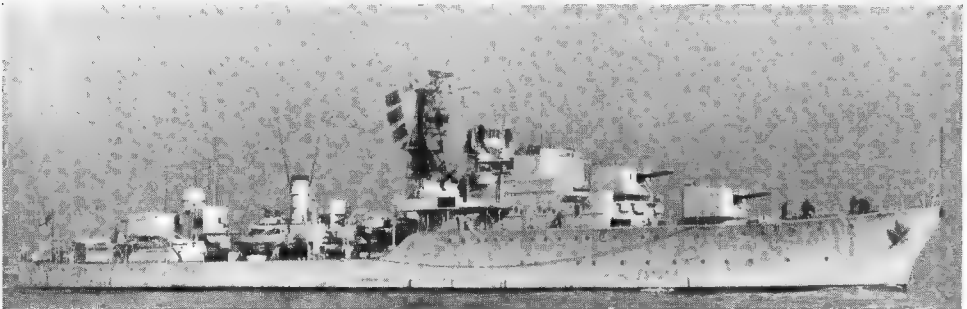
**Electrical Notes.**—All-electric galleys, laundry and fluorescent lighting. In four ships, Decoy, Diamond, Diana, and Duchess, the electrical installation differs from previous practice in ships of the Royal Navy in that it is an alternating current installation, operating at 440 volts. 3 phase, 60 cycles per second. Remaining four ships, Dainty, Daring, Defender, and Delight have direct current installation, 220 volts

Name	Builders	Laid down	Launched	Completed
Dainty	J. Samuel White & Co., Ltd., Cowes	17 Dec. 1945	16 Aug. 1950	Mar. 1953
Daring	Swan, Hunter & Wigham Richardson	29 Sep. 1945	10 Aug. 1949	2 Feb. 1952
Decoy	Yarrow & Co. Ltd., Scotstoun	22 Sep. 1946	29 Mar. 1949	28 Apr. 1953
Defender	Alex. Stephen & Sons, Ltd., Govan	22 Mar. 1949	27 July 1950	Dec. 1952
Delight	Fairfield S.B. & Eng. Co., Ltd., Govan	5 Sep. 1946	21 Dec. 1950	9 Oct. 1953
Diamond	John Brown & Co., Ltd., Clydebank.	15 Mar. 1949	14 June 1950	End Feb. 1952
Diana	Yarrow & Co., Ltd., Scotstoun	3 Apr. 1947	8 May 1952	19 Mar. 1954
Duchess	John I. Thornycroft & Co., Ltd., Woolston	2 July 1948	9 Apr. 1951	Nov. 1952



DARING (Diana also has this type of funnel).

1954, A. & J. Pavia.



DEFENDER.

1953, Wright & Logan.



DIAMOND.

1953, Wright & Logan.

# Fleet A/S Destroyers.

## 4 "Weapon" Class.



BATTLEAXE.

1951, Skyfotos.

### BATTLEAXE (Leader) BROADSWORD

Displacement : 1,980 tons standard (2,840 tons full load)  
 Dimensions : 341½ (pp.), 365 (o.a.) × 38 × 12½ (mean), 17 (max.) feet  
 Guns : 4—4 inch (in twin mounts), 6—40 mm. AA.  
 A/S Weapons : 2 Squids, 15 D.C.s. Limbo was mounted in Scorpion  
 Tubes : 10—21 inch (quintupled)  
 Machinery : Parsons geared turbines, 2 shafts, S.H.P. : 40,000 = 34 kts.  
 Boilers : 2 Foster-Wheeler, with controlled superheat of 750 degrees F. and working pressure of 430 lb.  
 Complement : per sq. inch  
 234 (Battleaxe, 256)

### CROSSBOW SCORPION (ex-Tomahawk, ex-Centaur)

**General Notes.**—Specially armed and equipped as fleet anti-submarine escorts. They embody novel features in ship and engine design. All four ships are fitted as Leaders. Sixteen more destroyers of this type were cancelled at the end of the Second World War at least three of which were actually launched before construction was abandoned.

**A/S Weapon Notes.**—The 2 Squids (3-barrelled depth charge mortars) are in "B" position in Battleaxe and Broadsword, and "X" position in Crossbow and Scorpion.

**Gunnery Notes.**—Crossbow and Scorpion have 4-inch disposed in "A" and "B" positions but in Battleaxe and Broadsword they are in "A" and "X" positions. The 40 mm. Bofors AA. pieces are of newest type and radar controlled, similar to those in "Daring" and "Battle" classes.

**Engineering Notes.**—There are two engine-rooms and two boiler-rooms, arranged alternately en echelon.

**Appearance Notes.**—First two-funnelled destroyers since pre-war "I" and "Tribal" classes, though forefunnel is not markedly apparent, being enveloped by lattice mast except for protruding cowl top, and second funnel is not very conspicuous, being a squat and vertical stack considerably further aft. Are of two types, easily distinguished—see A/S Weapon and Gunnery Notes above.

Name	Builders	Laid down	Launched	Completed
Battleaxe	Yarrow & Co. Ltd., Scotstoun	22 Apr. 1944	12 June 1945	23 Oct. 1947
Broadsword	Yarrow & Co., Ltd., Scotstoun	20 July 1944	5 Feb. 1946	4 Oct. 1948
Crossbow	John I. Thornycroft & Co., Woolston	26 Aug. 1944	20 Dec. 1945	4 Mar. 1948
Scorpion	J. Samuel White & Co., Ltd., Cowes	16 Dec. 1944	15 Aug. 1946	17 Sep. 1947



SCORPION.

1953, Wright & Logan.



BROADSWORD.

1952, A. & J. Pavia.



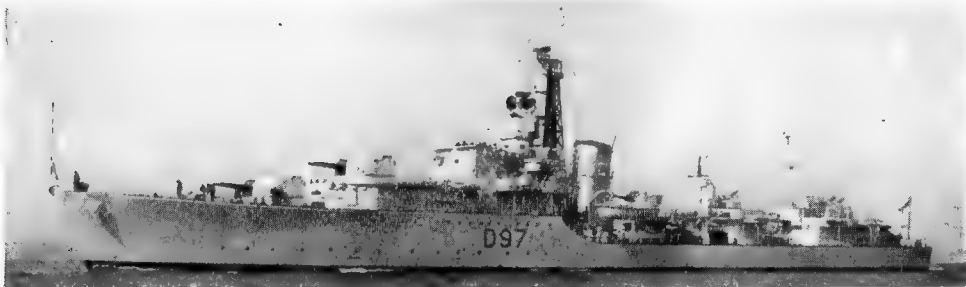
CROSSBOW

1952, A. & J. Pavia

GREAT BRITAIN—Destroyers

Fleet Destroyers.

8 Later “ Battle ” Class.



CORRUNNA

1954, Wright & Logan.



AISNE.

1950, Abrahams.



AGINCOURT

1954, courtesy Godfrey H. Walker, Esq.



BARROSA.

1954, Wright & Logan

2 Clydebank	2 Hawthorn Leslie	Stephen	1 Swan Hunter
BARROSA	AGINCOURT	DUNKIRK	CORUNNA
MATAPAN	ALAMEIN	JUTLAND (ex-Malplaquet)	1 Vickers-Armstrongs (Tyne)
		AISNE	

Displacement :	2,380 tons, Leaders 2,400 tons (3,315 to 3,375 tons full load)
Dimensions :	355 (pp.), 379 (o.a.) × 40½ × 12½ (mean), 17½ (max.) feet
Guns :	5—4.5 inch, 8—40 mm. AA.
Tubes :	10—21 inch (quintupled)
A S weapons.	1 Squid
Machinery :	Parsons geared turbines. 2 shafts. S.H.P. : 50,000 = 35.75 kts. (designed), 30.5 kts. sea speed
Complement :	232 to 268 (peace), 337 (war)

General Notes.— Apart from heavier armament, this class embodies several other improvements. Agincourt, Alamein, Corunna and Jutland are fitted as Leaders. Sixteen more destroyers of this type were cancelled at the end of the Second World War, at least 8 of which had been launched before construction was abandoned.

Gunnery Notes.—U.S.N. type fire control apparatus fitted, also latest type twin Bofors.

Appearance Notes.—Distinguished from Groups I and II by very large director tower of U.S. pattern and single 4.5 inch abaft funnel. Corunna and Dunkirk have H.F.D.F. mast alt.

Name	Laid down	Launched	Completed	Name	Laid down	Launched	Completed
Agincourt	12 Dec. 1943	29 Jan. 1945	25 June 1947	Corunna	12 Apr. 1944	29 May 1945	6 June 1947
Aisne	26 Aug. 1943	12 May 1945	20 Mar. 1947	Dunkirk	19 July 1944	27 Aug. 1945	27 Nov. 1946
Alamein	1 Mar. 1944	28 May 1945	21 May 1948	Jutland	27 Nov. 1944	20 Feb. 1946	30 Apr. 1947
Barrosa	28 Dec. 1943	17 Jan. 1945	14 Feb. 1947	Matapan	11 Mar. 1944	30 Apr. 1945	5 Sep. 1947



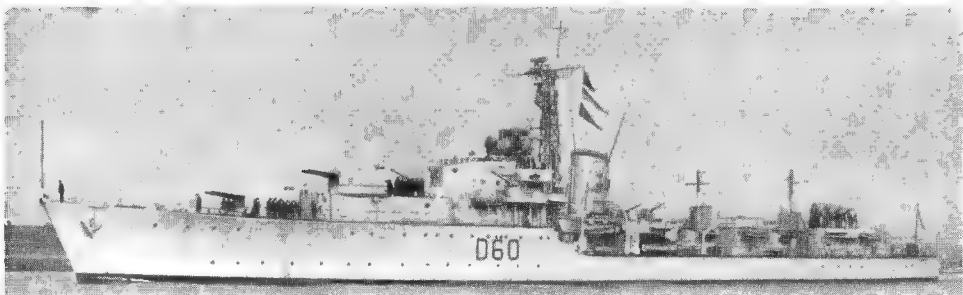
JUTLAND.

1950 ,Wright & Logan.



Fleet Destroyers.

16 “ Early Battle ” Class.



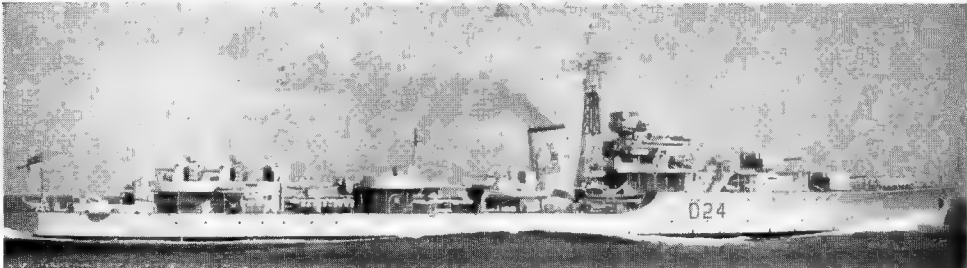
SLUYS.

1953, Wright & Logan.



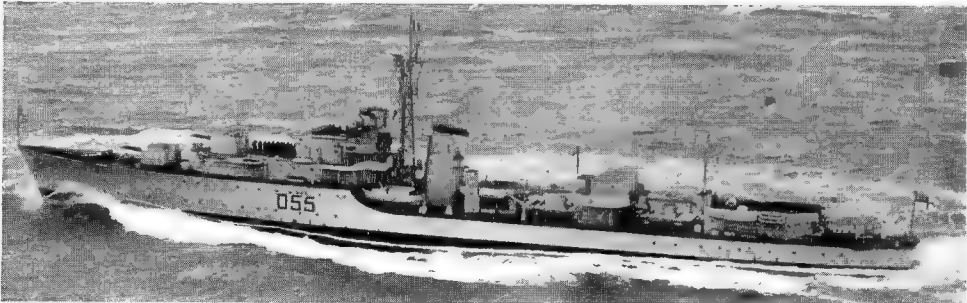
BARFLEUR

1954, A. & J. Pavia.



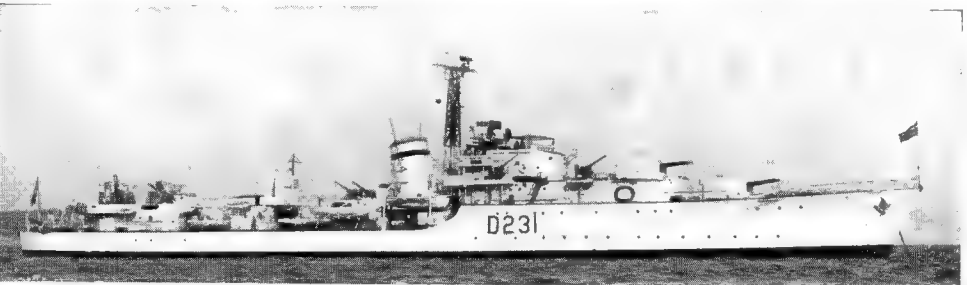
GRAVELINES.

1953, A. & J. Pavia.



FINISTERRE.

1951, Skyfotos.



VIGO.

1951, Wright & Logan.

GROUP I (Trafalgar type)

GROUP II (Armada type)

2 Cammell Laird

4 Swan Hunter

2 Cammell Laird

3 Hawthorn Leslie

**HOGUE**  
**LAGOS**

**BARFLEUR**  
**GABBARD**  
**ST. KITTS**  
**TRAFALGAR**

**GRAVELINES**  
**SLUYS**

**ARMADA**  
**SAINTES**  
**SOLEBAY**

2 Fairfield

3 Fairfield

**CAMPERDOWN**  
**FINISTERRE**

**CADIZ**  
**ST. JAMES**  
**VIGO**

Displacement : 2,315 tons Leaders 2,325 tons (3,235 to 3,300 tons full load)  
Dimensions : 355 (pp.), 379 (o.a.) x 40½ x 12½ (mean), 17 (max) feet  
Guns : 4—4.5 inch, 9 or 10—40 mm. AA., 2 D.C.T. (Camperdown, Hogue and Trafalgar also have 1—4 inch in “ Q ” position)  
Tubes : 8—21 inch (quadrupled)  
A/S Weapons : Squid (in Barfleur, Cadiz, Gabbard, Gravelines, Saintes, St. James, St. Kitts, Sluys and Solebay) on starboard of AX.  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 50,000 = 35.75 kts. (designed), 31 kts. sea speed  
Boilers : 2 Admiralty 3-drum type  
Complement : 247 to 308 (peace) ; 337 (war)

General Notes.—These destroyers were designed with a view to operations in the Pacific. Armada, Barfleur, Saintes, St. James, Solebay and Trafalgar fitted as Leaders. Finisterre is employed as gunnery firing and training ship. Barfleur as refitted no longer mounts a single 4-inch gun in “ Q ” position.

Gunnery Notes.—As completed all Group I carried 1—4 inch L.A. abaft funnel—now replaced in four ships by 40 mm. AA. The 4.5 inch guns have 85 degrees elevation. Group II have Bofors twin mountings of newest type.

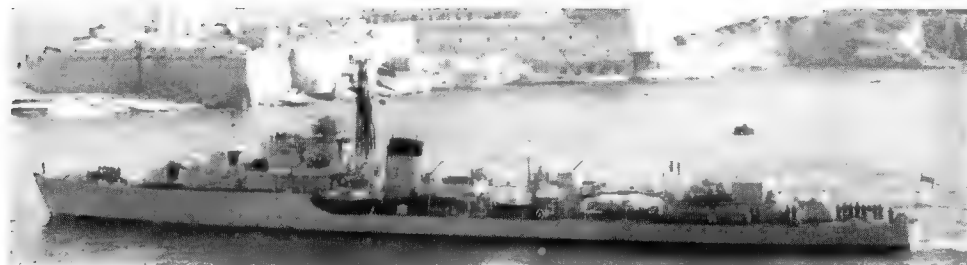
Appearance Notes.—First destroyers with all main armament forward. Little distinction between Groups I and II. Finisterre has reduced H.A. armament as Gunnery Training Ship.

Name	Laid down	Launched	Completed	Name	Laid down	Launched	Completed
Armada	29 Dec. 1942	9 Dec. 1943	2 July 1945	Lagos	8 Apr. 1943	4 Aug. 1944	2 Nov. 1945
Barfleur	28 Oct. 1942	1 Nov. 1943	14 Sep. 1944	Saintes	8 June 1943	19 July 1944	27 Sep. 1946
Cadiz	10 May 1943	16 Sep. 1944	12 Apr. 1946	St. James	20 May 1943	7 June 1945	12 July 1946
Camperdown	30 Oct. 1942	8 Feb. 1944	18 June 1945	St. Kitts	8 Sep. 1943	4 Oct. 1944	21 Jan. 1946
Finisterre	8 Dec. 1942	22 June 1944	11 Sep. 1945	Sluys	24 Nov. 1943	28 Feb. 1945	30 Sep. 1946
Gabbard	2 Feb. 1944	16 Mar. 1945	10 Dec. 1946	Solebay	3 Feb. 1943	22 Feb. 1944	11 Oct. 1945
Gravelines	10 Aug. 1943	30 Nov. 1944	14 June 1946	Trafalgar	15 Feb. 1943	12 Jan. 1944	23 July 1945
Hogue	6 Jan. 1943	21 Apr. 1944	24 July 1945	Vigo	11 Sep. 1943	27 Sep. 1945	9 Dec. 1946

## GREAT BRITAIN—Destroyers

### A/S and Minelaying Destroyers ("C" Group.)

25 "Ca", "Ch", "Co", "Cr" Classes.



CHEQUERS (squids in "X" position).

1953, A. & J. Pavia.

2 Clydebank  
**CAESAR** (ex-Ranger; Leader)  
**CAVENDISH** (ex-Sibyl; Leader)

1 Denny  
**CHILDERS** (ex-Pellew; Leader)

4 Scotts  
**CAMBRIAN** (ex-Spitfire)  
**CARRON** (ex-Strenuous)  
**CHEQUERS** (Leader)  
**CHIEFTAIN**

3 Stephen  
**CHEVIOT**  
**CHEVRON**  
**CONSORT**

4 Thornycroft  
**CHAPLET**  
**CHARITY**  
**COMUS**  
**CONCORD** (ex-Corso)

2 Vickers Armstrongs (Tyne)  
**CONSTANCE**  
**COSSACK** (Leader)

5 White  
**CARYSFORT**  
**CAVALIER**  
**CONTEST**  
**CRISPIN** (ex-Craccher)  
**CREOLE**

4 Yarrow  
**CAPRICE** (ex-Swallow)  
**CASSANDRA** (ex-Tourmaline)  
**COCKADE**  
**COMET**

Displacement : 1,710 tons (*Cavendish* and *Childers*, 1,730 tons) (2,515 tons to 2,560 tons full load)  
Dimensions : 362½ × 35½ × 10 (mean), 16 (max.) feet  
Guns : 2 or 3 or 4—4.5 inch, 2 to 7—40 mm. AA., 2 to 6—20 mm. or 2 pdr. AA. All later "C" class will eventually carry 3—4.5 inch, 6—40 mm. AA., 2 squids, or 2—4.5 inch, 4—40 mm. AA. with minelaying stern.  
Tubes : 4—21 inch (quadrupled), except "Ca" Class, 8  
A/S Weapons : 2 squids (*Chequers*, *Cheviot*, *Cockade*, *Comus*, *Concord*, *Consort*) in "X" position  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 40,000 = 36.75 kts. (designed), 31.25 kts. sea speed  
Boilers : 2 Admiralty 3-drum type  
Complement : 186 (Leaders, 222)

**General Notes.**—This group of destroyers are of emergency war design, with a modified form of hull. They were built as 4 flotillas i.e. "Caesar," "Chequers," "Cossack," and "Crescent" classes. Later classes are of all-welded construction. Two of "Cr" class, *Crescent* and *Crusader* were transferred to the Royal Canadian Navy, and four more were sold to Norway. *Chivalrous* was transferred to the Royal Pakistan Navy in 1953.

**Appearance Notes.**—Most have tall lattice masts (*Caprice* short). To distinguish "Ca" from "Ch", "Co" and "Cr" classes, modern director, one set of tubes only to compensate for power-worked guns. "Ch", "Co" and "Cr" classes, one large director on bridge, no forward set of tubes. *Comus*, *Concord*, *Crispin* have large AA. position amidships with light director as in "Battle" class. *Creole* and *Crispin* have W/T cabin instead of "B" gun. *Chaplet*, *Chevron*, *Childers*, and *Contest* have "X" gun removed. At present there are many variations in appearance as they are being reconstructed and refitted for A/S and M/L and modernised.

Name	Laid down	Launched	Completed	Name	Laid down	Launched	Completed
<i>Caesar</i>	3 Apr. 1943	14 Feb. 1944	5 Oct. 1944	<i>Chieftain</i>	27 June 1943	26 Feb. 1945	7 Mar. 1946
<i>Cambrian</i>	14 Aug. 1942	10 Dec. 1943	17 July 1944	<i>Childers</i>	27 Nov. 1943	27 Feb. 1945	19 Dec. 1945
<i>Caprice</i>	28 Sep. 1942	16 Sep. 1943	5 Apr. 1944	<i>Cockade</i>	11 Mar. 1943	7 Mar. 1944	29 Sep. 1945
<i>Carron</i>	26 Nov. 1942	28 Mar. 1944	6 Nov. 1944	<i>Comet</i>	14 June 1943	22 June 1944	6 June 1945
<i>Carysfort</i>	12 May 1943	25 July 1944	20 Feb. 1945	<i>Comus</i>	21 Aug. 1943	14 Mar. 1945	8 July 1946
<i>Cassandra</i>	30 Jan. 1943	29 Nov. 1943	28 July 1944	<i>Concord</i>	18 Nov. 1943	14 May 1945	20 Dec. 1946
<i>Cavalier</i>	28 Feb. 1943	7 Apr. 1944	22 Nov. 1944	<i>Consort</i>	26 May 1943	19 Oct. 1944	19 Mar. 1946
<i>Cavendish</i>	19 May 1943	12 Apr. 1944	13 Dec. 1944	<i>Constance</i>	18 Mar. 1943	22 Aug. 1944	31 Dec. 1945
<i>Chaplet</i>	29 Apr. 1943	18 July 1944	24 Aug. 1945	<i>Contest</i>	1 Nov. 1943	16 Dec. 1944	9 Nov. 1945
<i>Charity</i>	9 July 1943	30 Nov. 1944	19 Nov. 1945	<i>Cossack</i>	18 Mar. 1943	10 May 1944	4 Sep. 1945
<i>Chequers</i>	4 May 1943	30 Oct. 1944	28 Sep. 1945	<i>Creole</i>	3 Aug. 1944	22 Nov. 1945	14 Oct. 1946
<i>Cheviot</i>	27 Apr. 1943	2 May 1944	11 Dec. 1945	<i>Crispin</i>	1 Feb. 1944	23 June 1945	10 July 1946
<i>Chevron</i>	18 Mar. 1943	23 Feb. 1944	23 Aug. 1945				



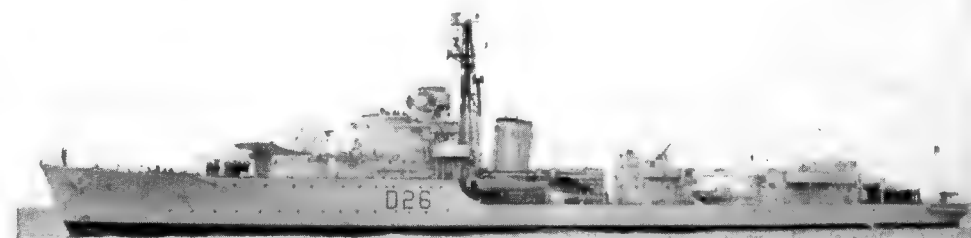
CRISPIN

1954, Skyfotos.



CHAPLET (note minelaying stern)

1954, A. & J. Pavia.



COMET (N.B. M/L stern)

1954, A. & J. Pavia.

# Destroyers.

## 6 "Zealous" Class.



MYNGS.

1953 Wright & Logan.



ZEPHYR.

1951, Skyfotos.

1 Cammell Laird	2 Denny	1 Thornycroft	2 Vickers-Armstrongs (Tyne)
<b>ZEALOUS</b>	<b>ZEBRA</b> (ex-Wakeful) <b>ZENITH</b> (ex-Wessex)	<b>ZODIAC</b>	<b>MYNGS</b> (Leader) <b>ZEPHYR</b>
Displacement : Dimensions : Guns : Tubes : Machinery : Boilers : Complement :	1,710 tons (Myngs, Zephyr, 1,730 tons) standard, 2,555 tons (Myngs, Zephyr, 2,575 tons) full load 362½ (o.a.) × 35½ × 16 (max.) feet 3 to 4—4.5 inch, D.P., 6—40 mm. AA., 4 D.C.T. (but Myngs has 4—4.5 inch, 2—2 pdr. 3—40 mm., 2—20 mm.) 8—21 inch (no after tubes in Myngs) Parsons geared turbines. S.H.P. : 40,000 = 36.75 kts. (designed), 31.25 kts. sea speed 2 Admiralty 3-drum type 186		

**General Notes.**—Machinery of last pair by Parsons. Understood to be of all-welded construction. *Zambesi* and *Zest* are being fully converted to fast anti-submarine frigates (see later page).

**Appearance Notes.**—First class of single 4.5 inch gunned destroyers. One director on bridge, larger than in "W" class. Short lattice foremast in *Myngs*, *Zambesi*, tall in remainder. No "Y" gun in *Zambesi*, *Zealous*, *Zephyr* and *Zodiac*.

Name	Laid down	Launched	Completed	Name	Laid down	Launched	Completed
<i>Myngs</i>	27 May 1942	31 May 1943	23 June 1944	<i>Zenith</i>	19 May 1942	5 June 1944	22 Dec. 1944
<i>Zealous</i>	5 May 1942	28 Feb. 1944	9 Oct. 1944	<i>Zephyr</i>	13 July 1942	15 July 1943	6 Sep. 1944
<i>Zebra</i>	14 May 1942	8 Mar. 1944	13 Oct. 1944	<i>Zodiac</i>	7 Nov. 1942	11 Mar. 1944	23 Oct. 1944

## Destroyers—continued.

### 2 "Wager" Class.

#### KEMPENFELT (ex-Valentine ; Leader)

#### WAGER

Displacement :	1,710 tons (Kempenfelt, 1,730 tons) standard, 2,505 tons (Kempenfelt, 2,525 tons) full load
Dimensions :	362½ × 35½ × 16 feet
Guns :	4—4.7, 3—40 mm. AA., (1—40 mm. in Kempenfelt), 4 D.C.T.
Tubes :	8—21 inch
Machinery :	Parsons geared turbines. S.H.P. : 40,000 = 36.75 kts. (designed), 31.25 kts. sea speed
Boilers :	2 Admiralty 3-drum type
Complement :	186

**General Notes.**—Similar to "C" and "Z" classes, which have only one director tower on bridge. *Wessex* was transferred to South African Naval Forces, March 29, 1950 and renamed *Jan van Riebeeck*, and *Whelp* was transferred to South African Navy, early 1952, and renamed *Simon van der Stel*. *Wakeful*, *Whirlwind*, *Wizard* and *Wrangler* have been converted to frigates, see later page. *Kempenfelt* is to be converted to a frigate.

**Appearance Notes.**—One director on bridge not so large as in later classes. Tall foremast in both. Single Bofors mounting high up abaft funnel in superfiring position.

Name	Builders	Laid down	Launched	Completed
<i>Kempenfelt</i>	John Brown & Co. Ltd., Clydebank	24 June 1942	8 May 1943	25 Oct. 1943
<i>Wager</i>	John Brown & Co. Ltd., Clydebank	20 Nov. 1942	1 Nov. 1943	14 Apr. 1944

### 1 "Savage" Class.



SAVAGE.

1952, J. W. Kennedy.

#### SAVAGE

Builders :	R. & W. Hawthorn, Leslie & Co., Ltd., Hebburn-on-Tyne
Laid down :	7 Dec. 1941
Launched :	24 Sept. 1942
Completed :	8 June 1943
Displacement :	1,730 tons standard (2,515 tons full load)
Dimensions :	366½ (o.a.) × 35½ × 17 (max.) feet
Guns :	4—4.5 inch (twin-turret and two single mountings)
Tubes :	8—21 inch (quadrupled)
A S weapons :	4 D.C.T.
Machinery :	Parsons geared turbines. S.H.P. : 40,000 = 36.75 kts. (designed), 31.25 kts. (sea speed)
Boilers :	2, of 3-drum type
Complement :	230

**General Notes.**—"Savage" class and five later groups were described officially as a utility type, priority having been given in the design to war requirements, above all other considerations. *Shark* (Scotts, since lost) and *Success* (White) were both transferred to the Royal Norwegian Navy ; *Scorpion*, *Scourge* and *Serapis* to the Royal Netherlands Navy, *Swift* (White) was lost in 1944 ; and *Saumarez* was so badly damaged by a mine in 1946 that she was not worth repairing. *Savage* is commissioned for experiments with shafts and propellers, but is scheduled for eventual conversion to a fast anti-submarine frigate.

**Appearance Notes.**—As will be observed from photo, *Savage* is fitted with a twin turret forward, prototype of those in "Battle" class, her armament being an experimental one. "Savage" class were first destroyers fitted with new type shields, *Savage* being first destroyer and only one of its class with new twin 4.5 inch turret.

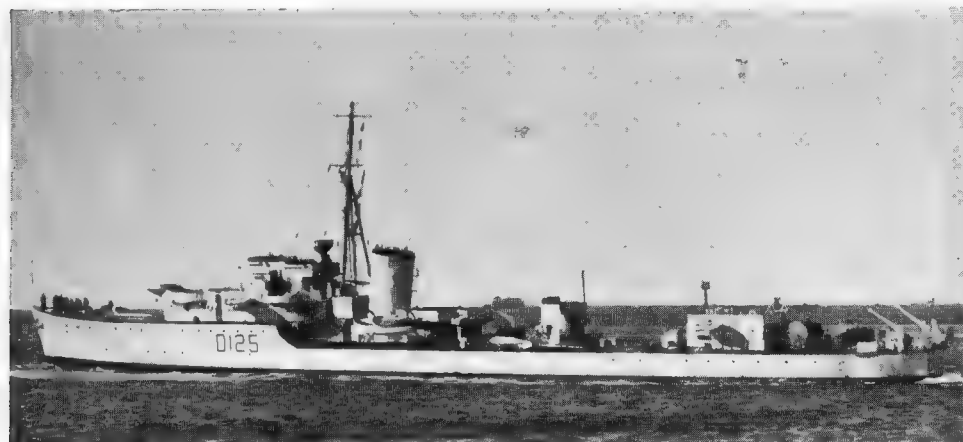
## GREAT BRITAIN—Destroyers

### 5 "Napier" Class.



NIZAM.

1951, P. A. Vicary.



NEPAL

1949, Abrahams.

#### NAPIER NEPAL (ex-Norseman) NIZAM NOBLE (ex-Piorun, ex-Nerissa) NORMAN

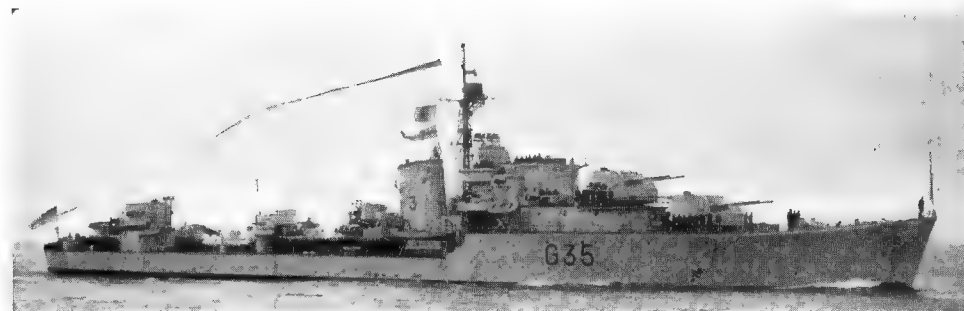
Displacement : 1,760 tons standard (2,540 tons full load)  
 Dimensions : 348 (pp.), 356½ (o.a.) × 35½ × 9 feet  
 Guns : 6—4.7 inch, 1—4 inch (in Noble only), 4—40 mm. AA., 6—20 mm. AA.,  
 4—2 pdr. (except Nepal, 2—3 pdr. only)  
 Tubes : 10—21 inch (except Nepal, disarmed)  
 Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 40,000 = 36 kts.  
 Boilers : 2 Admiralty 3-drum type  
 Complement : 220

**General Notes.**—Ordered under 1938 Estimates. Original Noble and Nonpareil of this class were transferred to Royal Netherlands Navy in 1942 and sold outright in 1945. Noble (ex-Nerissa) served under Polish flag during war. War losses: Nestor.

**Appearance Notes.**—Most of this class now have lattice mast. Ships are distinguishable from destroyers of later classes by bigger funnel, more numerous ports, and wider-spread lattice masts. Guns in twin mountings in large open shields. Separate director and rangefinder.

Name	Builders	Laid down	Launched	Completed
Napier	Fairfield S.B. & Eng. Co., Ltd., Govan.	26 July 1939	22 May 1940	11 Dec. 1940
Nepal	John I. Thornycroft & Co., Ltd., Woolston.	9 Sep. 1939	4 Dec. 1941	29 May 1942
Nizam	John Brown & Co., Ltd., Clydebank	27 July 1939	4 July 1940	8 Jan. 1941
Norman	John Brown & Co., Ltd., Clydebank.	27 July 1939	30 Oct. 1940	29 Sep. 1941
Noble	John I. Thornycroft & Co., Ltd., Woolston.	26 July 1939	7 May 1940	4 Nov. 1940

### 5 "Milne" Class.



MARNE.

Added 1951, Wright & Logan.



MUSKETEER.

1951, P. A. Vicary.

#### MARNE MATCHLESS METEOR MILNE (Leader) MUSKETEER

Displacement : 1,920 tons (Milne, 1,935 tons) standard, 2,840 tons full load  
 Dimensions : 354 (pp.), 362½ (o.a.) × 36½ × 10 (mean), 16½ (max.) feet  
 Guns : 6—4.7 inch, 1—4 inch, 4—2 pdr., 10—20 mm. AA. (Marne, Matchless, no 4-inch)  
 Tubes : 8—21 inch  
 Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 48,000 = 36 kts. (sea speed 31 kts. at 43,200 S.H.P.)  
 Boilers : 2 Admiralty 3-drum type

**General Notes.**—Ordered under 1937 and 1939 Estimates. Individual ships vary in detail. Later units are insulated for service in high latitudes. Musketeer after refit at Belfast has become the coastal forces depot and living ship at Harwich. To be converted into fast aircraft direction frigates. War losses: Mahratra, Martin and Polish Orrkan, ex-Myrmidon.

**Appearance Notes.**—These were the first destroyers to have 3 power-worked turrets. They were handsome ships with single director and wide funnel.

Name	Builders	Laid down	Launched	Completed
Marne	Vickers-Armstrongs, Ltd. (Tyne)	23 Oct. 1939	30 Oct. 1940	2 Dec. 1941
Matchless	Alex. Stephen & Sons, Ltd., Govan	14 Sep. 1940	4 Sep. 1941	26 Feb. 1942
Meteor	Alex. Stephens & Sons, Ltd., Govan	14 Sep. 1940	3 Nov. 1941	12 Aug. 1942
Milne	Scotts S.B. & Eng. Co., Ltd., Greenock	24 Jan. 1940	30 Dec. 1941	6 Aug. 1942
Musketeer	Fairfield S.B. & Eng. Co., Ltd. Govan	7 Dec. 1939	2 Dec. 1941	18 Sep. 1942



Minelaying Destroyers and Fast Frigates (ex-Destroyers)—GREAT BRITAIN

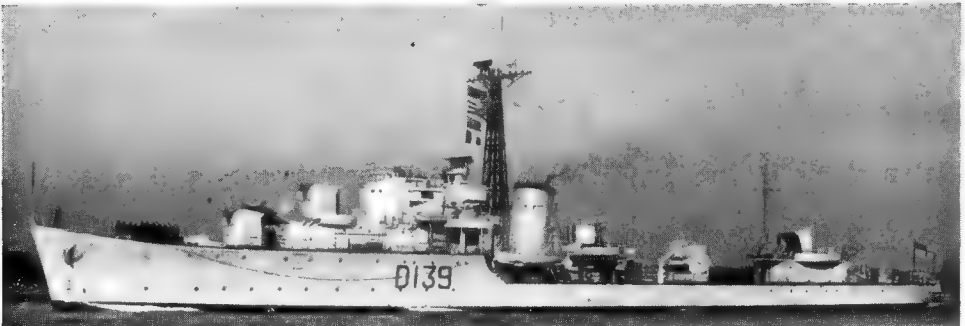
Minelaying Destroyers.

2 "Obdurate" Class.



OBDIENT

1954, courtesy Godfrey H. Walker, Esq.



OBDURATE.

1953, Wright & Logan

OBDURATE

OBDIENT

Displacement : 1,540 tons standard (2,400 tons full load)  
Dimensions : 338½ (pp.), 345 (o.a.) × 35 × 9 (mean), 15½ (max.) feet  
Guns : 4—4 inch, 4—2 pdr., 6—40 mm. AA.  
Tubes : Removed  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 40,000 = 34 kts.  
Boilers : 2 Admiralty 3-drum type

General Notes.—The surviving units of this class have been refitted as minelayers. They have old type 4-inch guns. These were the first destroyers built under War Construction Programme. *Oribi* was transferred to the Turkish Navy, and *Offa*, *Onslaught* and *Onslow* to Royal Pakistan Navy, and renamed; *Orwell* was converted into a fast anti-submarine frigate (see next column) in 1952. *Opportune* has been taken in hand, and *Obdurate* and *Obedient* will eventually also be converted into A/S frigates (limited conversion).

Appearance Notes.—Tall lattice mast in *Obdurate* and *Obedient*. Three Bofors in *Obdurate*. Single director. Big sheer forward.

Name	Builders	Laid down	Launched	Completed
Obdurate	} Wm. Denny & Bros., Ltd., Dumbarton	25 Apr. 1940	19 Feb. 1942	3 Sep. 1942
Obedient		22 May 1940	30 Apr. 1942	30 Oct. 1942

Fast Anti-Submarine Frigates.

2 "O" Class (Limited Conversion from Destroyers). 1st Rate.



ORWELL.

1954, Skyfotos.



ORWELL.

1953, Wright & Logan.

OPPORTUNE

ORWELL

Displacement : 1,540 tons standard (2,400 tons full load)  
Dimensions : 345 (o.a.) × 35 × 15½ (max.) feet  
Guns : 2—4 inch, 2—40 mm. Bofors AA.  
Tubes : 8—21 inch  
A/S Weapons : 2 squids  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 40,000 = 34 kts.  
Boilers : 2 Admiralty 3-drum type

Notes.—Originally two of the first "Emergency" destroyers built under the War Programme. *Orwell* converted into a fast anti-submarine frigate in 1952. *Opportune* taken in hand. Sister ships *Obdurate* and *Obedient* will eventually also be converted into A/S frigates.

Name	Builders	Laid down	Launched	Completed
Opportune	John I. Thornycroft & Co., Ltd., Woolston	28 May 1940	21 Jan. 1942	14 Aug. 1942
Orwell	John I. Thornycroft & Co., Ltd., Woolston	20 May 1940	2 Apr. 1942	17 Oct. 1942

GREAT BRITAIN—1st Rate Frigates (ex-Fleet Destroyers)

Fast Anti-Submarine Frigates.

7 "T" Class (Limited Conversion from Destroyers) 1st Rate.



TERMAGANT.

1954, Skyfotos.



TENACIOUS.

1953, Wright & Logan.

TEAZER  
TENACIOUS

TERMAGANT  
TERPSICHORE

TUMULT  
TUSCAN

TYRIAN

Displacement :	1,710 tons standard (2,510 tons full load)
Dimensions :	362½ (o.a.) × 35½ × 16 (max.) feet
Guns :	2—4 inch (twin mount), 7—40 mm. Bofors AA. (twin and singles)
Tubes :	4—21 inch (quadruple mount)
A/S Weapons	2 squids
Machinery :	Parsons geared turbines. S.H.P. : 40,000 = 34 kts.
Boilers :	2 Admiralty 3-drum type

Notes.—A simpler form of conversion from fleet destroyers which, without refinements, gives fast ships with good A S qualities more rapidly than a full conversion of the "Relentless" and "Rocket" type. *Tenacious*, conversion of which was completed in 1952, was the first of these. Remaining ship and former leader of this class, *Troubridge*, was also refitted (full conversion), but was to have been an "improved limited" type 18.

Name	Builders	Laid down	Launched	Completed
<i>Teazer</i>	Cammell, Laird & Co., Ltd., Birkenhead	20 Oct. 1941	7 Jan. 1943	13 Sep. 1943
<i>Tenacious</i>	Cammell, Laird & Co., Ltd., Birkenhead	3 Dec. 1941	24 Mar. 1943	30 Oct. 1943
<i>Termagant</i>	Wm. Denny & Bros., Ltd., Dumbarton	25 Nov. 1941	22 Mar. 1943	18 Oct. 1943
<i>Terpsichore</i>	Wm. Denny & Bros., Ltd., Dumbarton	25 Nov. 1941	17 June 1943	20 Jan. 1944
<i>Tumult</i>	John Brown & Co., Ltd., Clydebank	16 Nov. 1941	9 Nov. 1942	2 Apr. 1943
<i>Tuscan</i>	Swan, Hunter & Wigham Richardson, Ltd.	6 Sep. 1941	28 May 1942	11 Mar. 1943
<i>Tyrian</i>	Swan, Hunter & Wigham Richardson, Ltd.	15 Oct. 1941	27 July 1942	8 Apr. 1943

Fast Anti-Submarine Frigates—continued.

2 "P" Class (Limited Conversion from Destroyers). 1st Rate.

PALADIN

PETARD (ex-Persistent)

Displacement :	1,540 tons standard (2,315 tons full load)
Dimensions :	345 (o.a.) × 35 × 15½ (max.) feet
Guns :	Similar to <i>Orwell</i>
Tubes :	
A/S weapons :	Parsons geared turbines. 2 shafts. S.H.P. : 40,000 = 34 kts.
Machinery :	
Boilers :	2 Admiralty 3-drum type
Oil fuel :	500 tons
Complement :	175

Notes.—*Paladin* was formerly a destroyer employed as a submarine target ship. Machinery of *Petard* by Vickers Armstrongs (Barrow. Converted into fast anti-submarine frigates 1953-54.

Name	Builders	Laid down	Launched	Completed
<i>Paladin</i>	John Brown & Co., Ltd., Clydebank	22 July 1943	11 June 1941	12 Dec. 1941
<i>Petard</i>	Vickers-Armstrongs, Ltd., Tyne	26 Dec. 1939	27 Mar. 1941	14 June 1942

2 "Z" Class (Fully Converted from Destroyers) 1st Rate

ZAMBESI

ZEST

Displacement :	1,710 tons standard (2,555 tons full load)
Dimensions :	362½ (o.a.) × 35½ × 16 (max.) feet
Guns :	2—4 inch, 2—40 mm. Bofors AA.
A/S Weapons :	2 squids
Machinery :	Parsons geared turbines. 2 shafts. S.H.P. : 40,000 = 34 kts.
Boilers :	2 Admiralty 3-drum type
Complement :	174

Notes.—Former fleet destroyers. Fully converted into fast anti-submarine frigates 1954-55.

Name	Builders	Laid down	Launched	Completed
<i>Zambesi</i>	Cammell Laird & Co., Ltd., Birkenhead	21 Dec. 1942	21 Nov. 1943	18 July 1944
<i>Zest</i>	John I. Thornycroft & Co., Ltd., Woolston	21 July 1942	14 Oct. 1943	20 July 1944

General Conversion Notes.—45 destroyers of Z and earlier emergency classes were scheduled to be converted into fast anti-submarine frigates under the 1951-52 Programme. Of these 35 had been converted or taken in hand for conversion by the autumn of 1954.

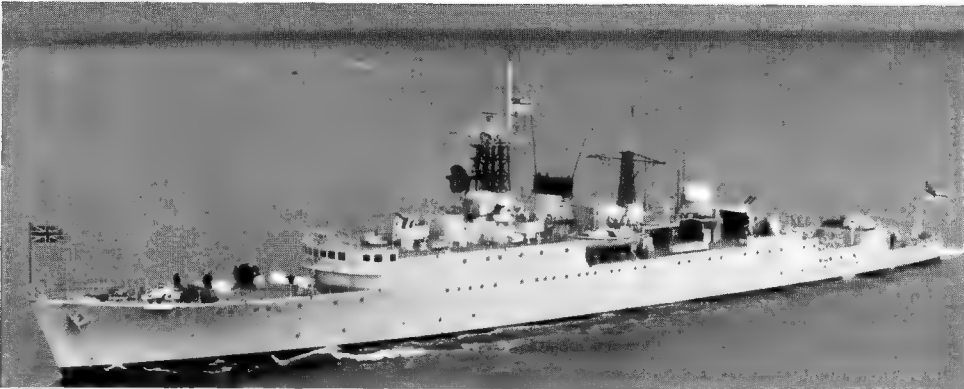
Fast Anti-Submarine Frigates—continued.

4 “W” Class (Fully Converted from Destroyers). 1st Rate.



WAKEFUL.

1954, A. & J. Pavia.



WRANGLER

1954, Skyfotos.

WAKEFUL (ex-Zebra)

WHIRLWIND

WIZARD

WRANGLER

Displacement : 1,710 tons standard (2,500 tons full load)  
Dimensions : 362½ × 35½ × 16 feet  
Guns : 2—4 inch, 2—40 mm. Bofors AA.  
A S Weapons : 2 squids  
Machinery : Parsons geared turbines, S.H.P. : 40,000 = 34 kts.  
Boilers : 2 Admiralty 3-drum type

Notes.—Wrangler was fully converted from a destroyer in 1951-52, Wakeful and Whirlwind in 1952-1953, Wizard in 1954.

Name	Builders	Laid down	Launched	Completed
Wakeful	Fairfield S.B. & Eng. Co., Ltd., Govan	3 June 1942	30 June 1943	17 Feb. 1944
Whirlwind	R. & W. Hawthorn, Leslie & Co. Ltd., Hebburn	31 July 1942	30 Aug. 1943	20 July 1944
Wizard	Vickers-Armstrongs, Ltd., Barrow	14 Sep. 1942	29 Sep. 1943	30 Mar. 1944
Wrangler	Vickers-Armstrongs, Ltd., Barrow	23 Sep. 1942	30 Dec. 1943	14 July 1944

1st Rate Frigates (ex-Fleet Destroyers)—GREAT BRITAIN

5 “V” Class (Fully Converted from Destroyers). 1st Rate.



VIRAGO.

1954, Wright & Logan.



VERULAM.

1953, A. & J. Pavia.

VENUS

VERULAM

VIGILANT

VIRAGO

VOLAGE

Displacement : 1,710 tons standard (2,500 tons full load)  
Dimensions : 362½ (o.a.) × 35½ × 16 (max.) feet  
Guns : 2—4 inch, 2—40 mm. Bofors A.A.  
Tubes : Tubes not mounted  
A S Weapons : 2 squids  
Machinery : Parsons geared turbines, 2 shafts. S.H.P. : 40,000 = 34 kts.  
Boilers : 2 Admiralty 3-drum type  
Complement : 174

Notes.—Verulam converted by H.M. Dockyard, Portsmouth, Vigilant by J. I. Thornycroft & Co., Ltd., Woolston, Southampton, Volage by J. Samuel White & Co., Ltd., Cowes 1952. Volage had her bow blown off by a mine explosion in the Corfu Channel in 1946, but was repaired at Malta and subsequently served in the Mediterranean Fleet until 1949. It has been officially stated that deck-heads in these vessels were originally sprayed with an asbestos coating to insulate living spaces from cold in high latitudes. Of the original flotilla of eight “V” class destroyers two, the Valentine and Vixen were transferred to the Royal Canadian Navy and renamed. A third, the flotilla leader Hardy, built by Clydebank, was lost in the Second World War.

Name	Builders	Laid down	Launched	Completed
Venus	Fairfield S.B. & Eng. Co., Ltd., Govan	12 Jan. 1942	23 Feb. 1943	28 Aug. 1943
Verulam	Fairfield, S.B. & Eng. Co., Ltd., Govan	26 Jan. 1942	22 Apr. 1943	10 Dec. 1943
Vigilant	Swan, Hunter & Wigham Richardson, Ltd.	31 Jan. 1942	22 Dec. 1942	10 Sep. 1943
Volage	J. Samuel White & Co., Ltd., Cowes	31 Dec. 1942	15 Dec. 1943	26 May 1944
Virago	Swan, Hunter & Wigham Richardson, Ltd.	16 Feb. 1942	4 Feb. 1943	5 Nov. 1943

GREAT BRITAIN—Ist Rate Frigates (ex-Fleet Destroyers)

8 “U” Class (Fully Converted From Destroyers). Ist Rate.



GRENVILLE. 1954, Skyfotos.

GRENVILLE ULSTER	ULYSSES UNDAUNTED	UNDINE URANIA	URCHIN URSA
	Displacement :	1,710 tons <i>standard</i> (Grenville 1,730 tons), 2,500 tons <i>full load</i> )	
	Dimensions :	362½ × 35½ × 16 ( <i>max.</i> ) feet	
	Guns :	Similar to "R" Class. Limbo in Grenville	
	Tubes :		
	A/S Weapons :		
	Machinery :	Parsons geared turbines. 2 shafts. S.H.P. : 40,000 = 34 kts.	
	Boilers :	2 Admiralty 3-drum type	

Notes.—Four converted under contract at private shipbuilding yards, 1952-53, Undaunted by J. Samuel White & Co., Ltd., Cowes, Isle of Wight. Urania and Ursa under conversion 1953-54. Grenville reconstructed as Relentless but no tubes and Limbo.

Name	Builders	Laid down	Launched	Completed
Grenville	Swan, Hunter & Wigham Richardson, Ltd., Wallsend	1 Nov. 1941	12 Oct. 1942	27 May 1943
Ulster	Swan, Hunter & Wigham Richardson, Ltd., Wallsend	12 Nov. 1941	9 Nov. 1942	30 June 1943
Ulysses	Cammell, Laird & Co., Ltd., Birkenhead	14 Mar. 1942	22 Apr. 1943	23 Dec. 1943
Undaunted	Cammell, Laird & Co., Ltd., Birkenhead	8 Sep. 1942	19 July 1943	3 Mar. 1944
Undine	John I. Thornycroft & Co. Ltd., Woolston	18 Mar. 1943	1 June 1943	23 Dec. 1943
Urania	Vickers-Armstrongs, Ltd., Barrow	18 June 1942	19 May 1943	18 Jan. 1944
Urchin	Vickers-Armstrongs, Ltd., Barrow	26 Mar. 1942	8 Mar. 1943	24 Sep. 1943
Ursa	John I. Thornycroft & Co., Ltd., Woolston	2 May 1942	22 July 1943	1 Mar. 1944

1 “T” Class (Fully Converted from Destroyer), Ist Rate.

TROUBRIDGE (Leader)	
Builders :	John Brown & Co., Ltd., Clydebank
Laid down :	10 Nov. 1941
Launched :	23 Sep. 1942
Completed :	8 Mar. 1943
Displacement :	1,730 tons <i>standard</i> (2,530 tons <i>full load</i> )
Dimensions :	339½ (pp.), 362½ (o.a.) × 35½ × 10 (mean), 16 (max.) feet
Guns :	2—4 inch, 2—40 mm. Bofors AA.
A.S. Weapons :	2 squids
Machinery :	Parsons geared turbines. S.H.P. : 40,000 = 34 kts.
Boilers :	2 Admiralty 3-drum type
Complement :	180

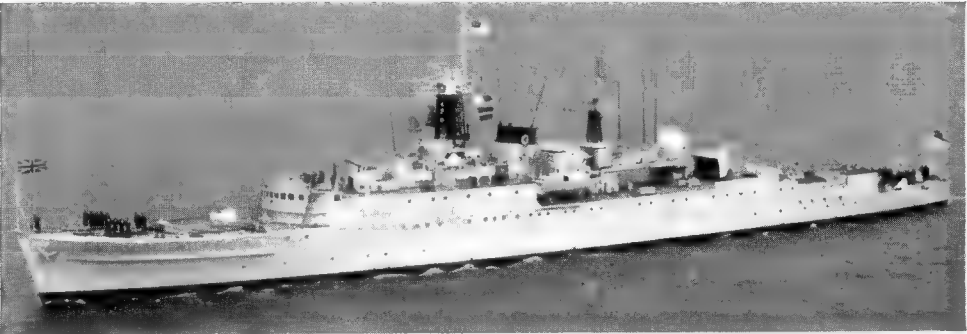
General Notes.—Teazer, Tenacious, Termagant, Terpsichore, Tumult, Tuscan and Tyrian, originally of this class, have been converted to fast anti-submarine frigates (limited conversion), see earlier page.

Fast Anti-Submarine Frigates—continued.

4 “R” Class (Fully Converted from Destroyers). Ist Rate.



ROEBUCK. 1954, Wright & Logan.



ROCKET. 1954, Skyfotos.

RAPID	RELENTLESS	ROCKET	ROEBUCK
Displacement :	1,705 tons (original), 2,500 tons full load		
Dimensions :	358½ × 35½ × 9½ (mean), 16 (max.) feet		
Guns :	2—4 inch (twin mount), 2—40 mm. Bofors AA.		
Tubes :	Relentless only : 2—21 inch (fixed) single. Four torpedoes		
A/S Weapons :	2 Limbos		
Machinery :	Parsons geared turbines. 2 shafts. S.H.P. : 40,000 = 34 kts. sea speed		
Boilers :	2 Admiralty 3-drum type		

*General Notes.*—*Relentless* and *Rocket*, former fleet destroyers, were converted to prototype fast frigates in 1949-51. Bridges, funnel, masts, superstructure, 4—4.7 inch guns in single mountings, 4—2 pdr. pompoms, 8—20 mm. AA. guns and 8—21 inch tubes in quadruple mountings, were removed entirely and ships stripped down to the bare hull. Forecastle deck was then extended aft, extensive use being made of aluminium to reduce top weight. New superstructure was built up, two short lattice masts stepped, short wide raked funnel erected, and two improved squids, arranged *en echelon*, mounted in after shelter deck. They have a completely new armament, and represent the new conception of a frigate submarine-killer. Conversion of *Relentless*, at H.M. Dockyard, Portsmouth, and *Rocket*, at H.M. Dockyard, Devonport, completed July 1951. *Rapid* and *Roebuck* similarly converted, 1952-53.

Appearance Notes.—Rocket has a pronounced knuckle or rubbing strake forward. Relentless fitted with torpedo tubes for experimental purposes.

Name	Original Builders	Laid down	Launched	Completed
Rapid	Cammell, Laird & Co., Ltd., Birkenhead	16 June 1941	16 July 1942	20 Feb. 1943
Relentless	John Brown & Co., Ltd., Clydebank	20 June 1941	15 July 1942	30 Nov. 1942
Rocket	Scotts S.B. & Eng. Co., Ltd., Greenock	14 Mar. 1941	28 Oct. 1942	4 Aug. 1943
Roebuck	Scotts S.B. & Eng. Co., Ltd., Greenock	19 June 1941	10 Dec. 1942	10 June 1943



25 New Construction.

Note.—25 frigates are being built under a new programme spread over three years, of which all have been ordered and begun during the 1951-52, 1952-53, 1953-54 and 1954-55 financial years.

Anti-Submarine Frigates

6 "Whitby" Class. 1st Rate.

(Anti-Submarine Quality Type)

EASTBOURNE	SCARBOROUGH	TENBY	TORQUAY	WHITBY
Displacement :	ca 2,000 tons standard			
Dimensions :	360 (pp.), 370 (o.a.) × 41 × — feet			
Guns :	2—4.5 inch, 2—40 mm. AA.			
A/S Weapons :	Highly developed new type			
Machinery :	2 sets geared steam turbines of advanced design. 2 shafts. High speed			
Boilers :	Babcock			

General Notes.—Officially stated that having been primarily designed for the location and detection of the most modern type of submarines, these first rate frigates will be fitted with the latest underwater detection equipment and anti-submarine weapons of post-war development. Good sea-keeping qualities will enable the vessels to maintain their high speed in rough seas. The vessels are all welded and the structural arrangements have been specially designed to achieve the lightest possible structure. Opportunity has been taken in their building to gain experience of welding procedures and arrangements calculated to conduce to rapid building of such vessels in emergency.

Engineering Notes.—The propelling machinery will include geared turbines of novel design and high power which start on a cruising turbine and automatically switch over to the main turbine at a predetermined speed.

Name	Builders	Engineers	Launched
Eastbourne	Vickers-Armstrongs, Ltd., Tyne	Vickers-Armstrongs Ltd., Barrow	
Scarborough	Vickers-Armstrongs, Ltd., Tyne	Vickers-Armstrongs, Ltd., Barrow	
Tenby	Cammell Laird & Co., Ltd., Birkenhead	Builders	
Torquay	Harland & Wolff, Ltd., Belfast	Builders	1 July 1954
Whitby	Cammell Laird & Co., Ltd., Birkenhead	Builders	2 July 1954

Anti-Submarine Frigates

12 "Blackwood" Class. 2nd Rate.

(Anti-Submarine Utility Type)

BLACKWOOD DUNCAN DUNDAS EXMOUTH	GRAFTON HARDY KEPPEL	MALCOLM MURRAY PELLEW RUSSELL
Displacement :	ca 1,300 tons	
Dimensions :	300 (pp.), 310 (o.a.) × 33 feet	
Guns :	3 Bofors Mk. 9	
Tubes :	4—21 inch (two twin)	
A/S Weapons :	2 Improved squid type three-barrelled mortars	
Machinery :	1 set geared steam turbines of advanced design. 1 shaft. Moderate speed	

General Notes.—These ships are of comparatively simple construction. Built in prefabricated sections. The two three-barrelled anti-submarine mortars are of the same design as those fitted in H.M.S. Rocket. Each can fire a pattern of large projectiles with great accuracy, and the projectiles can be set to explode at a pre-determined depth. These weapons can be trained over a wider arc than previous types of anti-submarine mortars.

Engineering Notes.—The propelling machinery of Hardy and Keppel will include turbines of Electric English Co. design. Dundas scheduled for trials 1954.

Name	Builders	Engineers	Launched
Blackwood	John I. Thornycroft & Co., Ltd., Southampton	Builders	
Duncan	John I. Thornycroft & Co., Ltd., Southampton	Builders	
Dundas	J. Samuel White & Co., Ltd., Cowes, Isle of Wight	Builders	25 Sep. 1953
Exmouth	J. Samuel White & Co., Ltd., Cowes, Isle of Wight	Builders	
Grafton	J. Samuel White & Co., Ltd., Cowes, Isle of Wight	Parsons	
Hardy	Yarrow & Co., Ltd., Scotstown	Builders	25 Nov. 1953
Keppel	Yarrow & Co., Ltd., Scotstown	Builders	31 Aug. 1954
Malcolm	Yarrow & Co., Ltd., Scotstown	Parsons	
Murray	Alex. Stephen & Sons, Ltd., Govan	Builders	
Pellew	Swan, Hunter & Wigham Richardson, Ltd., Wallsend	Wallsend Slipway & Eng. Co., Ltd.	
Russell	Swan, Hunter & Wigham Richardson, Ltd., Wallsend	Wallsend Slipway & Eng. Co., Ltd.	

Anti-Aircraft Frigates

4 "Leopard" Class.

(Diesel Anti-Aircraft Type)

JAGUAR	LEOPARD	LYNX	PUMA
	Displacement :	ca 1,800 tons	
	Dimensions :	330 (pp.), 340 (o.a.) × 40 × — feet	
	Guns :	4—4.5 inch (in two twin turrets), 2—40 mm. AA.	
	A/S Weapons :	Squid anti-submarine mortars	
	Machinery :	Admiralty standard range diesels	

General Notes.—These ships are designed primarily for the protection of convoys against aircraft. It is officially stated that these new anti-aircraft frigates will also serve as a smaller type of destroyer in offensive operations. They are all welded, and the structural arrangements represent the last word in the development of modern technique, it is officially stated, opportunity having been taken in their building to study the problems associated with rapid production in emergency conditions.

Gunnery Notes.—The gunnery armament control is similar to that fitted in the "Daring" class ships, and the gun mountings are the same as those in the "Daring" class.

Engineering Notes.—The propelling machinery consists of Admiralty Standard Range I heavy oil engines coupled to the propeller shafting through hydraulic couplings and oil-operated reverse and reduction gear boxes. Puma's engines, of the latest Admiralty design, are manufactured by H.M. Dockyard, Chatham, and Polar Engines, Ltd., Glasgow, the installation being by Scott's Shipbuilding and Engineering Co. Ltd. Engines of similar design are being used for driving the ships' electric generators, and these are being made by Peter Brotherhood, Ltd.

Name	Builders	Engineers	Laid down	Launched
Jaguar	Wm. Denny & Sons, Ltd., Dumbarton			
Leopard	H.M. Dockyard, Portsmouth	Vickers-Armstrongs, Ltd., Barrow	25 Mar. 1953	
Lynx	John Brown & Co., Ltd., Clydebank	Vickers-Armstrongs, Ltd., Barrow		
Puma	Scott's Shipbuilding & Engineering Co., Ltd., Greenock	See notes		30 June 1954

Aircraft Direction Frigates

3 "Salisbury" Class

(Diesel Aircraft Direction Type)

CHICHESTER	LLANDAFF	SALISBURY
	Displacement :	ca 1,800 tons
	Dimensions :	330 (pp.) 340 (o.a.) × 40 × — feet
	Guns :	2—4.5 inch, 2—40 mm. A.A.
	Machinery :	Admiralty standard range diesels engines

General Notes.—Salisbury, the prototype ship, was originally to have been built at Portsmouth. Construction is all welded and largely prefabricated. These ships have highly developed electronic equipment.

Engineering Notes.—All the above ships are to have diesels including some built under licence. Officially announced that the allocation of machinery between three ships under construction is provisional and may be subject to modification and constant revision.

Name	Builders	Engineers	Laid down	Launched
Chichester	Fairfield S.B. & Eng. Co., Ltd., Govan	Fairfield		
Llandaff	R. & W. Hawthorn Leslie & Co., Ltd., Hebburn-on-Tyne			
Salisbury	H.M. Dockyard, Devonport	Vickers-Armstrongs, Ltd., Barrow	23 Jan. 1952	25 June 1953

GREAT BRITAIN—Frigates

19 " Bay " Class.



WIDEMOUTH BAY.

1954, Wright & Logan.

- 1 Blyth S.B. Co.  
**CAWSAND BAY** (ex-Loch Roan)  
7 Harland & Wolff  
**ST. AUSTELL** (ex-Loch Lydoch)  
**ST. BRIDE'S BAY** (ex-Loch Achilly)  
**START BAY** (ex-Loch Arklet)  
**TREMADOC BAY** (ex-Loch Arnish)  
**WHITESAND BAY** (ex-Loch Lubnaig)  
**WIDEMOUTH BAY** (ex-Loch Frisa)  
**WIGTOWN BAY** (ex-Loch Garasdale)  
3 Charles Hill & Sons  
**BURGHEAD BAY** (ex-Loch Harport)  
**PORLOCK BAY** (ex-Loch Seaforth ; ex-Loch Muick)  
**VERYAN BAY** (ex-Loch Swannay)
- 3 Pickersgill  
**LARGO BAY** (ex-Loch Fionn)  
**MORECAMBE BAY** (ex-Loch Heilen) (completed by White)  
**MOUNTS BAY** (ex-Loch Kilbirnie) (completed by Thornycroft)  
3 Robb  
**CARDIGAN BAY** (ex-Loch Laxford)  
**CARNARVON BAY** (ex-Loch Maddy)  
**PADSTOW BAY** (ex-Loch Coulside)  
1 Smith's Dock Co.  
**ENARD BAY** (ex-Loch Bracadale)  
1 Hall Russell  
**BIGBURY BAY** (ex-Loch Carloway)

Displacement : 1,580 tons (2,400 tons full load)  
Dimensions : 286 (pp.), 307½ (o.a.) × 38½ × 12¾ feet (15½ feet max.)  
Guns : 4—4 inch, 6—40 mm. AA., 2—20 mm. AA. (Largo Bay only 4—40 mm.  
Some ships have 2—40 mm. Bofors instead of 2—20 mm.)  
A/S Weapons : 1 hedgehog. 4 D.C.T.  
Machinery : Triple expansion. 2 shafts. I.H.P. : 5,500 = 19.5 kts.  
Boilers : 2 Admiralty 3-drum type  
Oil fuel : 724 tons  
Complement : 157

Notes.—Designed primarily for AA. escort duties. Have shown excellent sea-keeping qualities in spite of considerable top weight carried, having ridden out China Sea typhoons. Four of this class were completed as surveying vessels, and two others refitted as despatch vessels, see later page. Cancelled ships : *Hollesley Bay* (ex-Loch Fannich), *Runswick Bay*.

Name	Laid down	Launched	Completed	Name	Laid down	Launched	Completed
Bigbury Bay	30 Mar. 1944	16 Nov. 1944	10 July 1945	Porlock Bay	22 Nov. 1944	14 June 1945	8 Mar. 1946
Burghead Bay	21 Sep. 1944	3 Mar. 1945	20 Sep. 1945	St. Austell Bay	30 May 1944	18 Nov. 1944	29 May 1945
Cardigan Bay	14 Apr. 1944	28 Dec. 1944	15 June 1945	St. Bride's Bay	30 May 1944	16 Jan. 1945	15 June 1945
Carnarvon Bay	8 June 1944	15 Mar. 1945	20 Sep. 1945	Start Bay	31 Aug. 1944	15 Feb. 1945	6 Sep. 1945
Cawsand Bay	24 Apr. 1944	26 Feb. 1945	13 Nov. 1945	Tremadoc Bay	31 Aug. 1944	29 Mar. 1945	11 Oct. 1945
Enard Bay	27 May 1944	31 Oct. 1944	4 Jan. 1946	Veryan Bay	8 June 1944	11 Nov. 1944	13 May 1945
Largo Bay	8 Feb. 1944	3 Oct. 1944	26 Jan. 1946	Whitesand Bay	8 Aug. 1944	16 Dec. 1944	30 July 1945
Morecambe Bay	30 Apr. 1944	1 Nov. 1944	22 Feb. 1949	Widemouth Bay	26 Apr. 1944	19 Oct. 1944	13 Apr. 1945
Mounts Bay	23 Oct. 1944	8 June 1945	11 Aug. 1949	Wigtown Bay	24 Oct. 1944	26 Apr. 1945	19 Jan. 1946
Padstow Bay	25 Sep. 1944	24 Aug. 1945	11 Mar. 1946				

General Note for " Loch-Bay " Type

" Bay " class and " Loch " class (see following page) were originally one class, but were subsequently sub-divided according to function, with differing armament. They could be refitted interchangeably as either anti-aircraft or anti-submarine vessels. Early units have " war finish". Later units not so austere.



BURGHEAD BAY.

1954, Skyfotos.



BIGBURY BAY.

1952, J. W. Kennedy.



MORECAMBE BAY.

Added 1950.

## A/S Frigates.

### 19 "Loch" Class.



LOCH ALVIE. (Modernised and rearmed)

1954, A. & J. Pavia.

2 Ailsa S.B. Co.

**LOCH TARBERT**  
**LOCH VEYATIE**

1 Barclay Curle

**LOCH ALVIE**

1 Blyth S.B. Co.

**LOCH QUOICH**

3 Burntisland S.B. Co.

**LOCH FYNIE**  
**LOCH GLENDHU**  
**LOCH KILLIN**

4 Caledon S.B. Co.

**LOCH ARKAIG**  
**LOCH LOMOND**  
**LOCH MORE**  
**LOCH TRALAIG**

1 Clydebank

**LOCH FADA**

3 Harland & Wolff

**LOCH CRAGGIE**  
**LOCH GORM**  
**LOCH KILLISPORT**

(both completed at Clydebank)

3 Charles Hill & Sons

**LOCH DUNVEGAN**  
**LOCH RUTHVEN**  
**LOCH SCAVAIG**

1 Robb

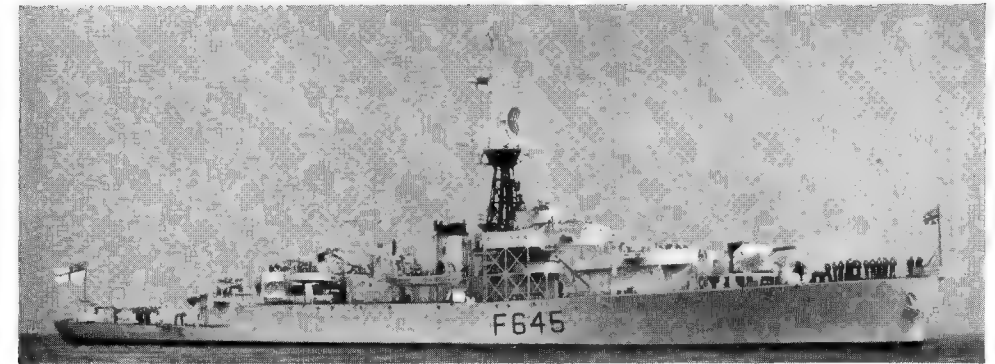
**LOCH INSH**

Displacement : 1,435 tons (2,260 tons full load). Modernised ships 1,475 tons (2,300 tons full load)  
Dimensions : 286 (pp.), 307 (o.a.) × 38½ × 12 feet, 14½ feet (max.)  
Guns : 1—4 inch, 4—2 pdr. pompoms, 4—40 mm. AA. Modernised ships 2—4 inch, 6—40 mm. Mk. 9 Bofors AA.  
A/S Weapons : 2 squids, 2 D.C.T.  
Machinery : Triple expansion. 2 shafts. I.H.P. : 5,500 = 19.5 kts. (Loch Arkaig and Loch Tralaig have double-reduction geared turbines)  
Boilers : 2 Admiralty 3-drum type  
Oil fuel : 724 tons  
Complement : 124

**General Notes.**—Designed primarily for anti-submarine escort duties. Two of this class, the *Loch Assynt* and *Loch Torridon*, were converted into depot and repair ships and renamed *Derby Haven* (since transferred to Persia) and *Woodbridge Haven*, respectively. Three were presented to the South African Navy and six were sold to the Royal New Zealand Navy.

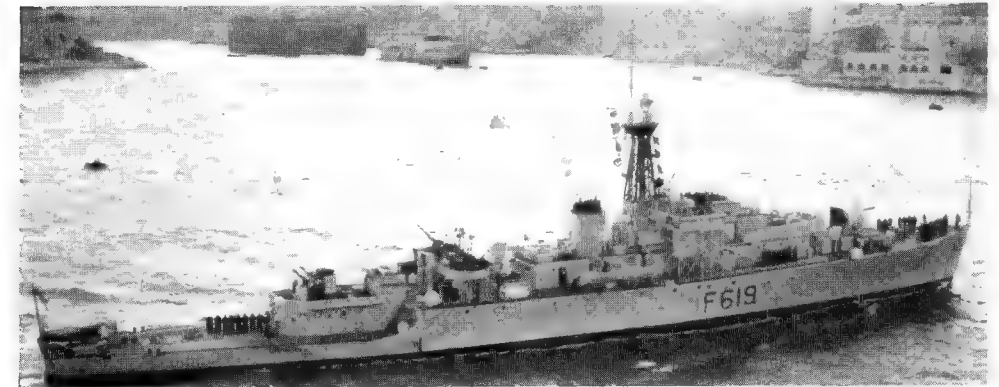
**Gunnery Notes.**—*Loch Ruthven* now mounts a new type twin 4-inch gun forward in "A" position and 6—40 mm.—two aft, two abaft funnel, two on bridge wings (and has two small platforms on the foremast either side at bridge top level). *Loch Alvie*, *Loch Fada* and *Loch Lomond* refitted similarly.

Name	Laid down	Launched	Completed	Name	Laid down	Launched	Completed
<i>Loch Alvie</i>	31 Aug. 1943	14 Apr. 1944	21 Aug. 1944	<i>Loch Killisport</i>	28 Dec. 1943	6 July 1944	9 July 1945
<i>Loch Arkaig</i>	1 Nov. 1944	7 June 1945	17 Nov. 1945	<i>Loch Lomond</i>	7 Dec. 1943	19 June 1944	16 Nov. 1944
<i>Loch Craggie</i>	28 Dec. 1943	23 May 1944	23 Oct. 1944	<i>Loch More</i>	16 Mar. 1944	3 Oct. 1944	24 Feb. 1945
<i>Loch Dunvegan</i>	29 Sep. 1943	25 Mar. 1944	30 June 1944	<i>Loch Quoich</i>	3 Dec. 1943	2 Sep. 1944	11 Jan. 1945
<i>Loch Fada</i>	8 June 1943	14 Dec. 1943	10 Apr. 1944	<i>Loch Ruthven</i>	4 Jan. 1944	3 June 1944	6 Oct. 1944
<i>Loch Fyne</i>	8 Dec. 1943	24 May 1944	9 Nov. 1944	<i>Loch Scavaig</i>	31 Mar. 1944	9 Sep. 1944	22 Dec. 1944
<i>Loch Glendhu</i>	29 May 1944	18 Oct. 1944	23 Feb. 1945	<i>Loch Tarbert</i>	30 Nov. 1943	19 Oct. 1944	22 Feb. 1945
<i>Loch Gorm</i>	28 Dec. 1943	8 June 1944	18 Dec. 1944	<i>Loch Tralaig</i>	26 June 1944	12 Feb. 1945	4 July 1945
<i>Loch Insh</i>	17 Nov. 1943	10 May 1944	20 Oct. 1944	<i>Loch Veyatie</i>	30 Mar. 1944	8 Oct. 1945	13 July 1946
<i>Loch Killin</i>	22 June 1943	29 Nov. 1943	12 Apr. 1944				



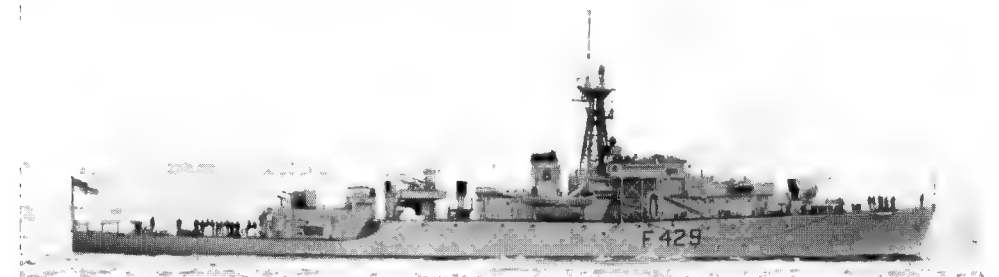
LOCH RUTHVEN (twin 4-inch in "A" position, squid in "B").

1953, Wright & Logan.



LOCH GLENDHU (Note after guns)

Photo Nov. 1953, Added 1954, A. & J. Pavia.



LOCH FYNIE.

1952, A. & J. Pavia.

GREAT BRITAIN—Frigates

Frigates (Ex-Sloops).

19 Later "Black Swan" Class



MAGPIE.

1954, A. & J. Pavia.

1 Cammel Laird

8 Denny

2 Stephen

3 Thornycroft

CYGNET

ALACRITY  
CRANE  
HIND  
MERMAID  
OPOSSUM  
SNIPE  
SPARROW  
WREN

AMETHYST  
HART

ACTAEON  
MAGPIE  
PEACOCK

2 Chatham Dockyard

MODESTE  
NEREIDE

1 Fairfield

2 Yarrow

WOODCOCK

PHEASANT  
WILD GOOSE

Displacement : 1,430 to 1,490 tons *standard* (1,880 to 1,925 tons *full load*)  
Dimensions: 299½ × 38½ × 8½ feet (11 feet *max.*)  
Guns : 6—4 inch, 6—40 mm. AA. (Light AA. differs from 8—40 mm. to 4—40 mm., 2—20 mm.)  
A/S Weapons Split hedgehog  
Machinery: Parsons geared turbine. 2 shafts. S.H.P. : 4,300 = 19.75 kts. (designed), 19 kts. sea speed  
Boilers : 2 of 3-drum type.  
Complement: 192

**General Notes.**—Originally rated as sloops. Designed displacement was 1,350 tons with a speed of 20 kts. but a large amount of extra equipment was added as compared with the earlier "Black Swan" type, resulting in increased displacement and reduced speed. Fitted with Denny-Brown roll reducer. *Amethyst* damaged in action on Yangtze 1949.

**Appearance Notes.**—*Pheasant* last of modified Blackburn class to have tripod pole mast. Large mess deck escape ports (visible in photos of *Peacock* and *Modeste*). Ports are in both forward messdecks in all ships of the class. *Woodcock* and *Wren*, originally counted as units of "Black Swan" class, were practically indistinguishable from later "Black Swan" type as completed. *Wild Goose* is the only one of the class with after superstructure, having extra cabins in place of "X" mounting and on quarter deck. She has been altered amidships, the "box" being removed abreast the funnel. *Wren* was refitted in April 1949 in Malta Dockyard, anti-submarine gear being removed from quarter deck and replaced by a structure containing Captain's quarters, and gun sponsons removed from the waist on either side.

Name	Laid down	Launched	Completed	Name	Laid down	Launched	Completed
<i>Actaeon</i>	15 May 1944	25 July 1945	24 July 1946	<i>Nereide</i>	15 Feb. 1943	29 Jan. 1944	6 May 1946
<i>Alacrity</i>	5 Apr. 1943	1 Sep. 1944	13 Apr. 1945	<i>Opossum</i>	28 July 1943	30 Nov. 1944	16 June 1945
<i>Amethyst</i>	25 Mar. 1942	7 May 1943	2 Nov. 1943	<i>Peacock</i>	29 Nov. 1942	11 Dec. 1943	10 May 1944
<i>Crane</i>	13 June 1941	9 Nov. 1942	10 May 1943	<i>Pheasant</i>	17 Mar. 1942	21 Dec. 1942	12 May 1943
<i>Cygnets</i>	30 Aug. 1941	28 July 1942	1 Dec. 1942	<i>Snipe</i>	21 Sep. 1944	20 Dec. 1945	9 Sep. 1946
<i>Hart</i>	27 Mar. 1942	7 July 1943	12 Dec. 1943	<i>Sparrow</i>	30 Nov. 1944	18 Feb. 1946	16 Dec. 1946
<i>Hind</i>	31 Aug. 1942	30 Sep. 1943	11 Apr. 1944	<i>Wild Goose</i>	28 Jan. 1942	14 Oct. 1942	11 Mar. 1943
<i>Magpie</i>	30 Dec. 1941	24 Mar. 1943	30 Aug. 1943	<i>Woodcock</i>	21 Oct. 1941	26 Nov. 1942	29 May 1943
<i>Mermaid</i>	8 Sep. 1942	11 Nov. 1943	1 May 1944	<i>Wren</i>	27 Feb. 1941	11 Aug. 1942	4 Feb. 1943
<i>Modeste</i>	15 Feb. 1943	29 Jan. 1944	3 Sep. 1945				



PEACOCK.

1954, Skyfotos.



MODESTE.

1953, Wright & Logan.



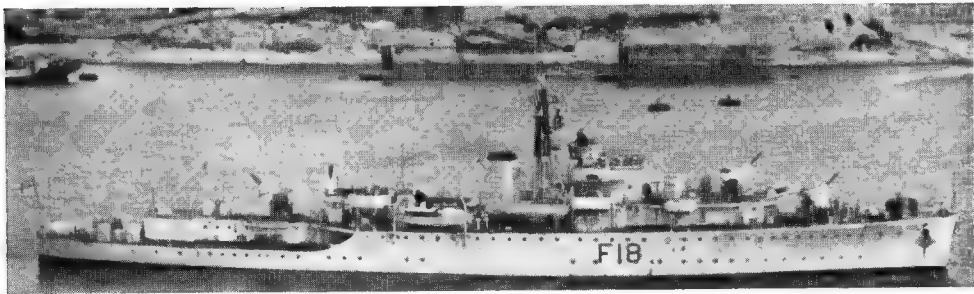
ALACRITY

1953, Wright & Logan.



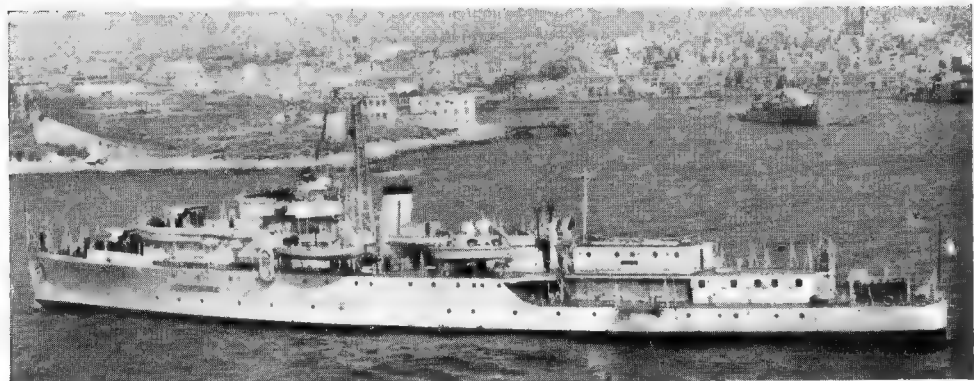
Frigates (Ex-Sloops).

2 "Black Swan" Class.



FLAMINGO.

1954, A. & J. Pavia.



WILD GOOSE (see page 44).

1951, A. & J. Pavia.

BLACK SWAN

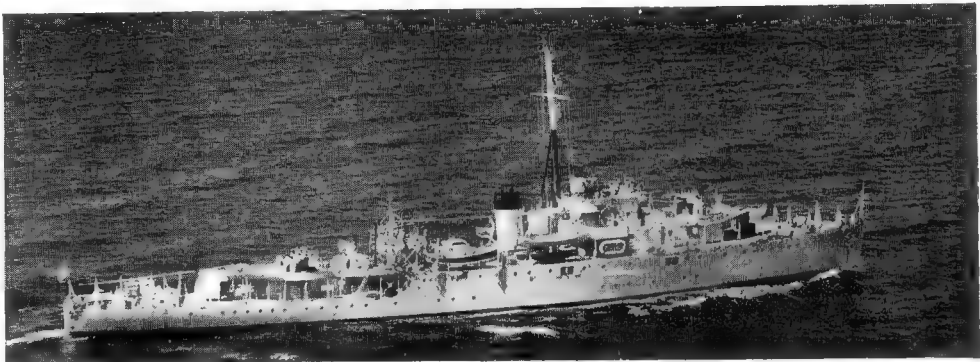
FLAMINGO

Displacement : 1,470 tons standard (1,925 tons full load)  
Dimensions: 299½ × 37½ × 8½ feet (11 feet max.)  
Guns: 6—4 inch, 4—40 mm., 2—3 pdr.  
A/S Weapons: Hedgehog.  
Machinery: Geared turbines. 2 shafts. S.H.P. : 4,300 = 19.75 kts. (designed), 19 kts. sea speed  
Boilers: 2, of 3-drum type  
Complement: 180

General Notes.—Designed for displacement of 1,300 tons and speed of 19.25 kts. This class has proved most successful in service. *Black Swan*, *Flamingo*, built under 1937 Estimates. *Redpole* and *Starling* of this class were disarmed for employment as navigational training ships and will be found on following page. *Erne* was converted and reconstructed as stationary drillship for Solent Division R.N.V.R. in 1952 (renamed *Wessex*), *Whimbrel* was transferred to the Egyptian Navy. War losses: *Ibis*, *Woodpecker*.

Name	Builders	Laid down	Launched	Completed
<i>Black Swan</i>	Yarrow & Co., Ltd., Scotstoun, Glasgow	20 June 1938	7 July 1939	27 Jan. 1940
<i>Flamingo</i>	Yarrow & Co., Ltd., Scotstoun, Glasgow	26 May 1938	19 Apr. 1939	3 Nov. 1939

Frigates (Ex-Sloops).



Added 1951, Official.

PELICAN

Builders : John I. Thornycroft & Co. Ltd., Southampton  
Laid down : 7 Sep. 1937  
Launched : 12 Sept. 1938  
Completed : 2 Mar. 1939  
Displacement : 1,250 tons standard (1,790 tons full load)  
Dimensions: 276 (w.l.), 293 (o.a.) × 37½ × 8½ (mean), 11 (max.) feet  
Guns: 6—4 inch, 4—40 mm. AA., 4—2 pdr. pompoms.  
Machinery: Parsons single reduction-gear type turbines. 2 shafts. S.H.P.: 3,600 = 19.25 kts. (max.)  
Boilers: 2 Admiralty 3-drum type  
Oil fuel: 370 tons  
Complement: 188

Notes.—Built under 1937 Estimates. Maximum sea speed is 19 kts. Radar cabin abaft bridge. War losses : *Aukland*, *Egret*.



1946, Wright & Logan.

STORK

Builders : Wm. Denny & Bros. Ltd., Dumbarton  
Laid down : 19 June 1935  
Launched : 21 Apr. 1936  
Completed : 10 Sep. 1936  
Displacement : 1,190 tons standard (1,790 tons full load)  
Dimensions: 266 (w.l.), 282 (o.a.) × 37 × 8½ (mean), 12 (max.) feet  
Guns: 4—4 inch. 2—40 mm. AA., 4 D.C.T.  
Machinery: Parsons geared turbines. 2 shafts. S.H.P. : 3,300 = 19 kts. max. sea speed  
Boilers: 2 Admiralty 3-drum type  
Oil fuel: 270 tons  
Complement: 125

Notes.—Built under 1934 Estimates as a Surveying Vessel, but refitted as a Sloop in 1939. Armament modified 1946 by removal of "B" mounting. Now in reserve. Sister ship *Bittern* was a war loss.

GREAT BRITAIN—Frigates

Frigates.

17 "River" Class.



HELMSDALE.

Added 1953, J. W. Kennedy.

3 Blyth S.B. Co.	2 Hall, Russell & Co.	2 A. & J. Inglis, Ltd.	4 Smith's Dock Co., Ltd.
BALLINDERRY	HELFOED	HELMSDALE	ODZANI
DART	LOCHY	KALE	TAY
RIBBLE (ex-Duddon)			TOWY
1 Geo. Brown & Co.	2 Charles Hill & Sons	2 Henry Robb, Ltd.	WEAR
CHELMER	JED	DERG	
	TAFF	NESS	
1 Fleming & Ferguson			
EXE			

Displacement: 1,370 to 1,490 tons standard (1,920 to 2,216 tons full load)  
Dimensions: 283 (pp.), 301½ (o.a.) × 36½ × 14 feet  
Guns: 2—4 inch, 10—20 mm. AA.  
A/S Weapons: 1 hedgehog, 4 D.C.T. (Helmsdale, 2 squids)  
Machinery: Triple expansion. 2 shafts. I.H.P. : 5,500 = 20 kts. (sea speed 18 kts.)  
Geared turbines in *Chelmer*, *Helmsdale*  
2 Admiralty 3-drum type  
Boilers: 2  
Oil fuel: 440 tons  
Complement: 140

General Notes.—These ships have shown very good endurance and sea-keeping qualities. In several, 20 mm. have been replaced by 40 mm. guns. *Helmsdale* (Training and Experimental, Special Complement) no longer has guns; *Ribble* transferred to Royal Netherlands Navy; *Annan* and *Monnow* to Royal Danish Navy; *Braid*, *Frome*, *Moyola*, *Strule*, *Torrige*, *Windrush* to French Navy; *Avon*, *Awe* to Portuguese Navy; *Nith*, *Spey*, *Usk* to Royal Egyptian Navy; *Bann*, *Trent* to Indian Navy; *Deveron*, *Nadder* to Royal Pakistan Navy; and *Fal* to Burmese Navy. Second World War losses: *Itchen*, *Mourne*, *Tweed*. Scrapped as result of heavy damage: *Cam*, *Cuckmere*, *Lagan*, *Teme*. Wrecked: *Aire*. Discarded: *Ettrick*, *Halladale* (converted into a Channel car ferry 1945-50). Now rated as Landing Ship Headquarters, Small: *Meon*, *Waveney* (see later page). *Exe* (unarmed except for D.C.T. in 1954) is also earmarked for conversion to Landing Ship Headquarters, Small, in which capacity she served for some time subsequent to 1949. *Plym* was expended (completely vaporised) when Britain's first atomic bomb was exploded in her at Monte Bello Islands, off north-west Australia, 3 Oct., 1952.

Appearance Notes.—In many, port wing bridge is plated in. Fan aerial on bridge. Experimental *Helmsdale* no longer has guns.

Recent Disposals.—*Dovey*, *Nene*, *Rother*, *Swale*, *Tavy*, *Tees*, *Test*, *Teviot* and *Wye* all due to be scrapped in 1954.

Name	Laid down	Launched	Completed	Name	Laid down	Launched	Completed
Ballinderry	6 Nov. 1941	7 Dec. 1942	2 Sep. 1943	Lochy	23 Feb. 1943	30 Oct. 1943	8 Feb. 1944
Chelmer	29 Dec. 1941	27 Mar. 1943	29 Sep. 1943	Ness	3 Sep. 1941	30 July 1942	27 Dec. 1942
Dart	8 Sep. 1941	10 Oct. 1942	15 May 1943	Odzani	18 Nov. 1942	19 May 1943	2 Sep. 1943
Derg	16 Apr. 1942	7 Jan. 1943	10 June 1943	Ribble	31 Dec. 1942	10 Nov. 1943	4 Aug. 1944
Exe	16 May 1941	19 Mar. 1942	6 Aug. 1942	Taff	14 Apr. 1943	11 Sep. 1943	7 Jan. 1944
Helford	27 June 1942	6 Feb. 1943	26 June 1943	Tay	10 Sep. 1941	18 Mar. 1942	5 Aug. 1942
Helmsdale	13 Aug. 1942	5 June 1943	15 Oct. 1943	Towy	3 Sep. 1942	4 Mar. 1943	10 June 1943
Jed	27 Sep. 1941	30 July 1942	30 Nov. 1942	Wear	16 Oct. 1941	1 June 1942	24 Oct. 1942
Kale	22 Sep. 1941	24 June 1942	4 Dec. 1942				



WEAR.

Added 1951, Wright & Logan.



NESS

1951, P. A. Vicary.



WREN (see page 44).

Added 1951.

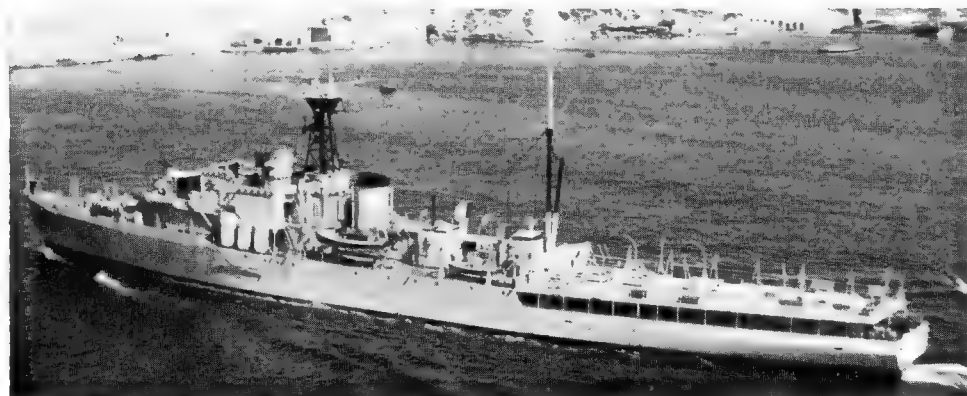
## Despatch Vessels.

2 Modified "Loch-Bay" Type.



SURPRISE.

Added 1954, Wright & Logan.



SURPRISE.

1951, A. & J. Pavia.

**ALERT** (ex-Dundrum Bay; ex-Loch Scamadale).

**SURPRISE** (ex-Gerrans Bay; ex-Loch Carron)

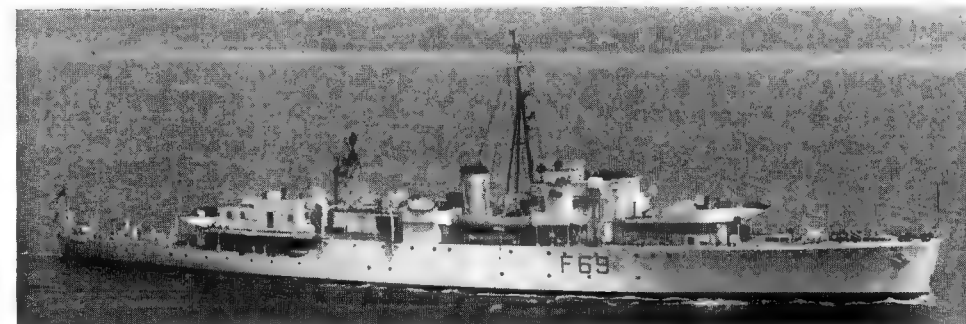
Displacement :	1,590 tons standard (2,440 tons full load)
Dimensions :	286 (pp.), 307½ (o.a.) × 38½ × 12½ feet, 15 feet (max.)
Guns :	2—4 inch, 2—40 mm., 4—3 pdr.
Machinery :	Triple expansion. 2 shafts. I.H.P.: 5,500 = 19.5 kts.
Boilers :	2 Admiralty 3-drum type
Oil fuel :	720 tons

Notes.—Originally frigates of "Loch" class, these ships were to have been completed as units of "Bay" class, but were modified with reduced armament and extra accommodation to serve as Despatch Vessels or Commanders-in-Chief's "yachts" on Far East and Mediterranean Stations, respectively. *Surprise* was refitted as a temporary Royal Yacht for the Coronation Naval Review at Spithead on 15 June 1953, the twin 4 inch gun mounting in "B" position being removed to provide an inspecting platform dais for Her Majesty The Queen.

Name	Builders	Laid down	Launched	Completed
<i>Alert</i>	Blyth Dry Docks & S.B. Co., Ltd.	28 July 1944	10 July 1945	24 Oct. 1946
<i>Surprise</i>	Smith's Dock Co., Ltd., South Bank-on-Tees	21 Apr. 1944	14 Mar. 1945	9 Sept. 1946

## Navigational Training Ships.

2 Modified "Black Swan" Class.



REDPOLE.

1953, Skyfotos.



STARLING.

1949, P. A. Vicary.

**REDPOLE**

**STARLING**

Displacement :	1,470 tons standard (1,925 tons full load)
Dimensions :	299½ × 38 × 11 feet
Machinery :	Parsons geared turbines. 2 shafts. S.H.P.: 4,300 = 19.75 kts.
Boilers :	2 Admiralty 3-drum type

General Notes.—Formerly sloops (later reclassified as frigates) of "Black Swan" class. Armament removed and lattice mainmasts for radar fitted. Now serving as Navigational School Instructional Tenders.

Appearance Notes.—*Redpole* retains tripod foremast. *Starling* has lattice foremast.

Name	Builders	Laid down	Launched	Completed
<i>Redpole</i>	Yarrow & Co., Ltd., Scotstoun	18 May 1942	25 Feb. 1943	24 June 1943
<i>Starling</i>	Fairfield S.B. & Eng. Co., Ltd., Govan	21 Oct. 1941	14 Oct. 1942	1 Apr. 1943

GREAT BRITAIN—Frigates

A.A. Frigates (Ex-Escort Destroyers).

39 "Hunt" Group.

General Note for "Hunt" Group.—Designed for escort duties. A grand total of 86 ships of the four classes were built. War losses and transfers to the Royal Danish, Egyptian, Royal Hellenic, Indian and Royal Norwegian navies are detailed under the respective types. Others have been scrapped.

2 "Brecon" Class (Type IV).



BRISSENDEN

1947, London Studio.

BRECON

BRISSENDEN

Displacement :	1,175 tons (1,770 tons full load)
Dimensions :	296 × 33½ × 9 feet (13½ feet max.)
Guns :	Brissenden, 6—4 inch AA., 4—2 pdr., 8—20 mm. AA. Brecon, 6—4 inch AA., 4—2 pdr., 2—40 mm. AA., 2—20 mm. AA.
Tubes :	3—21 inch
A/S Weapons	4 D.C.T.
Machinery :	Parsons geared turbines. 2 shafts. S.H.P. : 19,000 = 25 kts. Sea speed 24.5 kts.
Boilers :	2 Admiralty 3-drum type
Complement	170

Note.—A particularly handsome and successful type. Designed for Arctic service, with double deck fore and aft, and extra beam. No war losses, only two of this class having been built.

Name	Builders	Laid down	Launched	Completed
Brecon	John I. Thornycroft & Co., Ltd., Woolston, Southampton	27 Feb. 1941	27 June 1942	18 Dec. 1942
Brissenden		28 Feb. 1941	15 Sep. 1942	12 Feb. 1943

"Hunt" Group—continued.

8 "Albrighton" Class (Type III).



MELBREAK.

1953, Wright & Logan.



BLEASDALE.

1950, Wright & Logan.

ALBRIGHTON  
BELVOIR

BLEASDALE  
EGGESFORD

HAYDON  
MELBREAK

STEVENSTONE  
TALYBONT

Displacement :	1,037 tons (1,620 tons full load)
Dimensions :	264½ (pp), 280 (o.a.) × 31½ × 7½ (mean feet)
Guns :	4—4 inch AA., 4—2 pdr. pom-pom, 2—20 or 40 mm. AA.
Tubes :	2—21 inch
Machinery	Parsons geared turbines. 2 shafts. S.H.P. : 19,000 = 29 kts. (designed). Actual speed 25.5 kts.
Boilers :	2 Admiralty 3-drum type
Oil fuel :	280 tons
Complement :	168

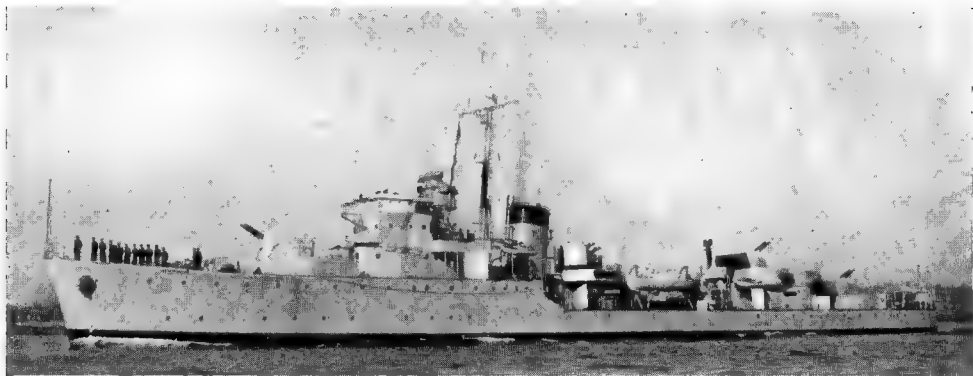
Notes.—28 of this class built. War losses : Aldenham, Blean, Norwegian Eskdale, French La Combattante (ex-Haldon), Holcombe (L 56), Limbourne (L 57), Penylan (L 89). Taken over by Greece, Bolebroke, Border, Hatherleigh, Modbury, Tanatside ; by Norway, Glaisdale. Others scrapped.

Name	Builders	Laid down	Launched	Completed
Albrighton	John Brown & Co., Ltd., Clydebank	30 Dec. 1940	11 Oct. 1941	22 Feb. 1942
Belvoir	Cammell, Laird & Co., Ltd., Birkenhead	14 Oct. 1940	18 Nov. 1941	29 Mar. 1942
Bleasdale	Vickers-Armstrongs, Ltd., Tyne	31 Oct. 1940	23 July 1941	16 Apr. 1942
Eggesford	J. Samuel White & Co., Ltd., Cowes	23 June 1941	12 Sep. 1942	21 Jan. 1943
Haydon	Vickers-Armstrongs, Ltd., Tyne	1 May 1941	2 Apr. 1942	24 Oct. 1942
Melbreak	Swan, Hunter & Wigham Richardson, Ltd.	23 June 1941	5 Mar. 1942	10 Oct. 1942
Stevenstone	J. Samuel White & Co., Ltd., Cowes	2 Sep. 1941	23 Nov. 1942	18 Mar. 1943
Talybont	J. Samuel White & Co., Ltd., Cowes	23 Nov. 1941	3 Feb. 1943	19 May 1943



“ Hunt ” Group—continued.

13 “Blankney” Class (Type II).



BICESTER.

1951. J. Wright & Logan.

2 Clydebank	1 Stephen	1 Vickers-Armstrongs (Tyne)	3 Yarrow
AVON VALE	CROOME	MIDDLETON	OAKLEY (ex-Tickham)
BLANKNEY	1 Swan Hunter	2 White	WHEATLAND
1 Hawthorn	FARNDALE	SILVERTON (ex-Krakowiak, ex-Silverton)	WILTON
BICESTER	1 Thornycroft	TETCOTT	
1 Scotts	LEDBURY		
COWDRAY			

Displacement :	1,050 tons (1,610 tons full load)
Dimensions :	264½ (pp.), 280 (o.a.) × 31½ × 7½ (mean) 14 (max.) feet.
Guns :	6—4 inch AA., 4—2 pdr. pompom, 2 to 4—20 mm. AA.
Tubes :	None
Machinery :	Parsons geared turbines. 2 shafts. S.H.P. : 19,000 = 29 kts. (designed).
Boilers :	Actual speed 25·25 kts.
Oil fuel :	2 Admiralty 3-drum type
Complement :	280 tons
	146

Notes.—A total of 33 of this class were built. War losses : Dulverton, Grove, Heythrop, Hurworth, Polish Kujawiak (ex-Oakley I), Puckeridge Southwold. Taken over by Greece, Bramham, Hursley, Lauderdale. Late in 1952 Blackmore, Exmoor, and Calpe lent to Denmark; and Beaufort and Zetland lent to Norway for four years. Bedale, Chiddingfold and Lamerton lent to Indian Navy for three years announced (27 Oct. 1952) subject to extension by agreement, the vessels to be returned on request in an emergency. Others scrapped.

Name	Laid down	Launched	Completed	Name	Laid down	Launched	Completed
Avon Vale	12 Feb. 1940	23 Oct. 1940	17 Feb. 1941	Ledbury	24 Jan. 1940	27 Sep. 1941	11 Feb. 1942
Bicester	29 May 1940	5 Sep. 1941	18 June 1942	Middleton	10 Apr. 1940	12 May 1941	10 Jan. 1942
Blankney	17 May 1940	19 Dec. 1940	11 Apr. 1941	Oakley	19 Aug. 1940	15 Jan. 1942	7 May 1942
Cowdray	30 Apr. 1940	22 July 1941	29 July 1942	Silverton	5 Dec. 1939	4 Dec. 1940	28 May 1941
Croome	7 June 1940	30 Jan. 1941	29 June 1941	Tetcott	29 July 1940	12 Aug. 1941	11 Dec. 1941
Farndale	21 Nov. 1939	30 Sep. 1940	27 Apr. 1941	Wheatland	30 May 1940	7 June 1941	3 Nov. 1941
				Wilton	7 June 1941	17 Oct. 1941	18 Feb. 1942

“ Hunt ” Group—continued.

16 “Atherstone” Class (Type I).



BROCKLESBY.

1953, J. W. Kennedy.

3 Cammel Laird	2 Scotts	3 Swan Hunter	1 White
ATHERSTONE	PYTHLEY	HAMBLEDON	SOUTHDOWN
BLENCATHRA	QUANTOCK	HOLDERNESSE	3 Yarrow
BROCKLESBY	1 Stephen	MEYNELL	CATTISTOCK
	WHADDON	1 Vickers-Armstrongs (Tyne)	CLEVELAND
2 Clydebank		EGLINTON	COTSWOLD
FERNIE			
GARTH			

Displacement :	1,000 tons standard (1,490 tons full load)
Dimensions :	272½ (pp.), 280 (o.a.) × 29 × 7½ feet
Guns :	4—4 inch AA., 2—20 mm. AA. (some have 4—2 pdr. besides)
Tubes :	None
Machinery :	Parsons geared turbines (by Wallsend Slipway in Swan Hunter units). 2 shafts.
Boilers :	S.H.P. : 19,000 = 30 kts. (designed). Actual speed 26·75 kts.
Complement :	2 Admiralty 3-drum type
	146

Notes.—A total of 23 of this class were built. Brocklesby is in commission at Portland for Asdic Training and trials. She is disarmed and has a deckhouse aft joining the after superstructure (formerly a pompom platform) almost to the funnel. Blencathra, Fernie, Meynell, Pythley, Quantock, Southdown, are disarmed as air target ships. Mendip, transferred to Chinese Navy in May, 1948, was returned to the Royal Navy a year later, but transferred to Egypt in 1949. Cottesmore was also transferred to Egypt in 1951. Liddesdale was discarded. War losses : Berkeley, Exmoor, Quorn, Tynedale.

Name	Laid down	Launched	Completed	Name	Laid down	Launched	Completed
Atherstone	8 June 1939	12 Dec. 1939	23 Mar. 1940	Garth	8 June 1939	14 Feb. 1940	1 July 1940
Blencathra	18 Nov. 1939	6 Aug. 1940	14 Dec. 1940	Hambledon	8 June 1939	12 Dec. 1939	8 June 1940
Brocklesby	18 Nov. 1939	30 Sep. 1940	9 Apr. 1941	Holderness	29 June 1939	8 Feb. 1940	10 Aug. 1940
Cattistock	9 June 1939	22 Feb. 1940	1 Aug. 1940	Meynell	10 Aug. 1939	7 June 1940	30 Dec. 1940
Cleveland	7 July 1939	24 Apr. 1940	18 Sep. 1940	Pythley	26 July 1939	13 Feb. 1940	23 Oct. 1940
Cotswold	11 Oct. 1939	18 July 1940	16 Nov. 1940	Quantock	26 July 1939	22 Apr. 1940	6 Feb. 1941
Eglinton	8 June 1939	28 Dec. 1939	28 Aug. 1940	Southdown	22 Aug. 1939	5 July 1940	8 Nov. 1940
Fernie	8 June 1939	9 Jan. 1940	29 May 1940	Whaddon	27 July 1939	16 July 1940	28 Feb. 1941

Frigates—GREAT BRITAIN

A/S Frigates (ex-Corvettes).

24 "Castle" Class.



TINTAGEL CASTLE.

1954, Skyfotos.



FLINT CASTLE.

1954, C. Parsons. Esq.



HEDINGHAM CASTLE.

1950.

- ALLINGTON CASTLE (ex-Amaryllis)

ALNWICK CASTLE

AMBERLEY CASTLE

BAMBOROUGH CASTLE

BERKELEY CASTLE

CAISTOR CASTLE

CARISBROOKE CASTLE

DUMBARTON CASTLE
- FARNHAM CASTLE

FLINT CASTLE

HADLEIGH CASTLE

HEDINGHAM CASTLE (ex-Gorey Castle)

KENILWORTH CASTLE

KNARESBOROUGH CASTLE

LANCASTER CASTLE

LAUNCESTON CASTLE

- LEEDS CASTLE
- MORPETH CASTLE
- OAKHAM CASTLE
- OXFORD CASTLE
- PEVENSEY CASTLE
- PORTCHESTER CASTLE
- RUSHEN CASTLE
- TINTAGEL CASTLE

Displacement: 1,060 to 1,100 tons (1,580 tons full load)

Dimensions: 225 (pp.), 252 (o.a.) × 36½ × 13½ (mean), 15½ (max.) feet.

Guns: 1—4 inch, 2—40 mm. AA., 2—20 mm. AA. (Some have 4—40 mm. AA. instead of 2—40 mm. AA., 2—20 mm. AA.). See notes

A/S Weapons: 1 squid, 2 D.C.T.

Machinery: Triple expansion. I.H.P. : 2,880 = 16.5 kts. (designed max.)

Boilers: 2 Admiralty 3-drum type

Oil fuel: 480 tons

General Notes.—Smith's Dock Co., Ltd., were largely responsible for design of these ships, which represented a very definite improvement on the "Flower" type. Shrewsbury Castle transferred to Royal Norwegian Navy and lost. Twelve more turned over to Royal Canadian Navy. War losses: Denbigh Castle, Hurst Castle (Caledon). Maiden Castle, Scarborough Castle, Rayleigh Castle, York Castle were completed as Rescue Ships Empire Lifeguard, Empire Peacemaker, Empire Rest and Empire Comfort respectively. 52 others either cancelled, or not completed as warships (names in 1953-54 and earlier editions). One of these, built by George Brown & Co., became Rescue Ship Empire Shelter.

Gunnery Notes.—Several ships of this class now mount 4—40 mm., the 20 mm. pieces on the bridge wings being replaced by single 40 mm.

Name	Builders	Laid down	Launched	Completed
Allington Castle	Fleming & Ferguson, Ltd., Paisley	22 July 1943	29 Feb. 1944	19 June 1944
Alnwick Castle	Geo. Brown & Co. (Marine) Ltd., Greenock	12 June 1943	23 May 1944	11 Nov. 1944
Amberley Castle	S. P. Austin & Son, Ltd., Sunderland	31 May 1943	27 Nov. 1943	24 Nov. 1944
Bamborough Castle	John Lewis & Sons, Ltd., Aberdeen	1 July 1943	11 Jan. 1944	30 May 1944
Berkeley Castle	Barclay Curle & Co., Ltd., Glasgow	23 Apr. 1943	19 Aug. 1943	18 Nov. 1943
Caistor Castle	John Lewis & Sons, Ltd., Aberdeen	26 Aug. 1943	22 May 1944	29 Sep. 1944
Carisbrooke Castle	Caledon S.B. & Eng. Co., Ltd., Dundee	12 Mar. 1943	31 July 1943	17 Nov. 1943
Dumbarton Castle	Caledon S.B. & Eng. Co., Ltd., Dundee	6 May 1943	28 Sep. 1943	25 Feb. 1944
Farnham Castle	John Crown & Sons, Ltd., Sunderland	25 June 1943	25 Apr. 1944	31 Jan. 1945
Flint Castle	Henry Robb, Ltd., Leith	20 Apr. 1943	1 Sep. 1943	31 Dec. 1943
Hadleigh Castle	Smith's Dock Co., Ltd., South Bank-on-Tees	4 Apr. 1943	21 June 1943	18 Sep. 1943
Hedingham Castle	John Crown & Sons, Ltd., Sunderland	2 Nov. 1943	30 Oct. 1944	12 May 1945
Kenilworth Castle	Smith's Dock Co., Ltd., South Bank-on-Tees	7 May 1943	17 Aug. 1943	22 Nov. 1943
Knaresborough Castle	Blyth D.D. & S.B. Co., Ltd., Blyth	22 Apr. 1943	28 Sep. 1943	5 Apr. 1944
Launceston Castle	Fleming & Ferguson, Ltd., Paisley	10 Sep. 1943	14 Apr. 1944	15 Sep. 1944
Leeds Castle	Blyth D.D. & S.B. Co., Ltd., Blyth	27 May 1943	27 Nov. 1943	20 June 1944
Morpeth Castle	Wm. Pickersgill & Sons, Ltd., Sunderland	22 Apr. 1943	12 Oct. 1943	15 Feb. 1944
Oakham Castle	Harland & Wolff, Ltd., Belfast	23 June 1943	26 Nov. 1943	13 July 1944
Oxford Castle	A. & J. Inglis, Ltd., Glasgow	30 Nov. 1943	20 July 1944	10 Dec. 1944
Pevensey Castle	Harland & Wolff, Ltd., Belfast	21 June 1943	11 Dec. 1943	10 Mar. 1944
Portchester Castle	Harland & Wolff, Ltd., Belfast	17 Mar. 1943	21 Jan. 1944	10 June 1944
Rushden Castle	Swan, Hunter & Wig. Rich., Ltd., Wallsend	21 Mar. 1943	21 June 1943	8 Nov. 1943
Tintagel Castle	Swan, Hunter & Wig. Rich., Ltd., Wallsend	8 Apr. 1943	16 July 1943	24 Feb. 1944
	Ailsa S.B. Co., Ltd., Troon	29 Apr. 1943	13 Dec. 1943	7 Apr. 1944

## Submarine Target Ship.



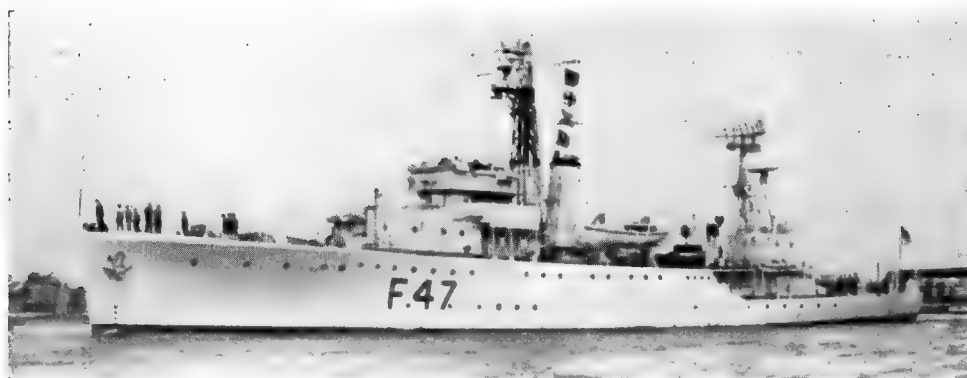
1914, Skyfoto.

### WOODBRIDGE HAVEN (ex-Loch Torridon)

Builders : Swan, Hunter & Wigham Richardson, Ltd., Wallsend-on-Tyne  
Laid down : 2 May 1944  
Launched : 13 Jan. 1945  
Completed : 19 Oct. 1945  
Displacement : 1,652 tons standard, 2,160 tons full load  
Dimensions : 307½ × 38½ × 14 feet  
Guns : 2—40 mm. AA., 3—20 mm. AA.  
Machinery : Triple expansion. 2 shafts. I.H.P.: 5,500 = 19.5 kts.  
Boilers : 2 Admiralty 3-drum type

Notes.—Submarine Target Ship. Built as a frigate but converted into a submarine target ship. Pendant No. P 58

## Radio Trials Ship.



1954, J. W. Kennedy.

### FLEETWOOD

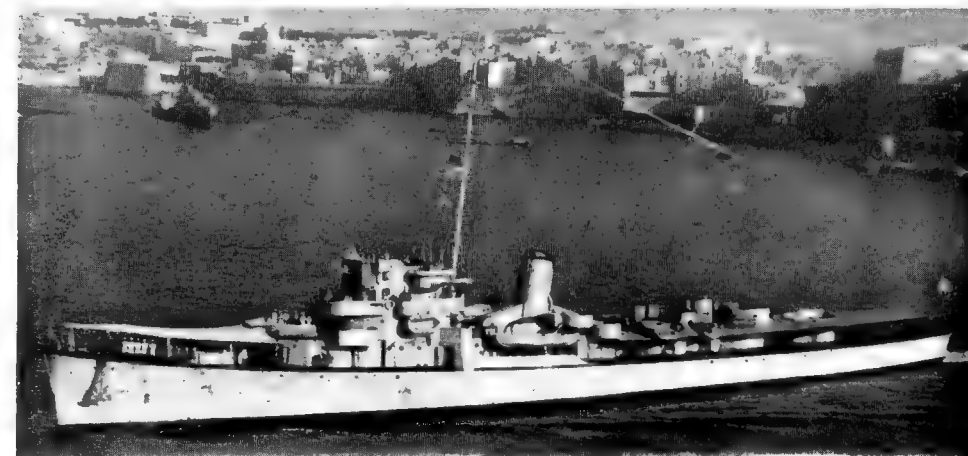
Builders : H.M. Dockyard, Devonport  
Laid down : 14 Aug. 1935  
Launched : 24 Mar. 1936  
Completed : 19 Nov. 1936  
Displacement : 990 tons standard (1,500 tons full load)  
Dimensions : 250 (pp.), 266 (o.a.) × 36 × 7½ (mean), 10 (max.) feet  
Machinery : 2 sets Parsons geared turbines. 2 shafts. S.H.P.: 2,000 = 16.5 kts.  
Boilers : 2 Admiralty 3-drum type  
Oil fuel : 280 tons

Notes.—Radio Trials Ship for Admiralty Signal and Radar Establishment. Bridge structure extended to provide extra accommodation.

## Experimental Vessel

### I "Captain" Class.

**Special Note.**—This ship was allocated for gas-turbine experiments and was the first major warship and the first vessel at all of the size for which gas-turbines had been manufactured, but it was officially confirmed in 1954 that she will not be fitted with gas turbines, and the vessel is now in reserve.



HOTHAM.

Added 1951, A. & J. Pavia.

### HOTHAM

Builders : Bethlehem-Hingham Shipyard  
Laid down : 5 Nov. 1943  
Launched : 22 Dec. 1943  
Completed : 8 Feb. 1944 (date turned over to U.K.)  
Displacement : 1,300 tons (1,840 tons full load)  
Dimensions : 300 (w.l.), 306 (o.a.) × 36½ × 14 feet  
Guns : 4—20 mm. AA.  
Machinery : (see Engineering Notes and Experimental Notes)  
Oil fuel : 335 tons  
Complement : 220

**General Notes.**—This ship was a counterpart of the United States destroyer-escorts of the "Buckley" type except that she had no torpedo tubes. Pre-fabricated and entirely welded. Originally there were no openings in sides but scuttles were subsequently provided. Sole survivor of this class in Royal Navy, six having been lost and 39 returned to the U.S.A. for scrapping. This ship was stripped of armament and most internal fittings in early 1945 and adapted as a floating power station for Singapore. On the recapture of that port the need for her did not arise, and she went to Hong Kong where she acted as port guardship. She subsequently returned to Singapore where she fulfilled her original purpose. She returned to the United Kingdom after the war. She subsequently went into dockyard hands for the installation of gas-turbine plant and limited reconstruction.

**Engineering Notes.**—Original propelling machinery comprised geared steam turbines with electric drive turning two shafts. S.H.P.: 12,000 = 24 kts. New gas turbine machinery for the ship was built in 1951. This English Electric propulsion unit of 6,000 H.P. was to have been installed in 1952.

**Experimental Notes.**—It is officially reported that work on this ship is at present suspended. The Admiralty's 6,000 H.P. marine gas turbine EL 60A, will not undergo tests in the frigate *Hotham* as planned, because more advanced gas turbines are available.

## Submarines

### 4 Midget Type New Construction

X 51

X 52

X 53

X 54

Notes.—Built by Vickers-Armstrongs, Ltd., Barrow.

### I "XE" Class.

XE 9

Displacement : 30 tons surface ; 34 tons submerged  
Dimensions : 53 × 5½ × 7 feet  
Machinery : Gardner engine, B.H.P. : 42 = 6.5 kts. surface ; electric motor. H.P. : 30 = 6 kts. submerged  
Complement : 3 officers, 5 ratings

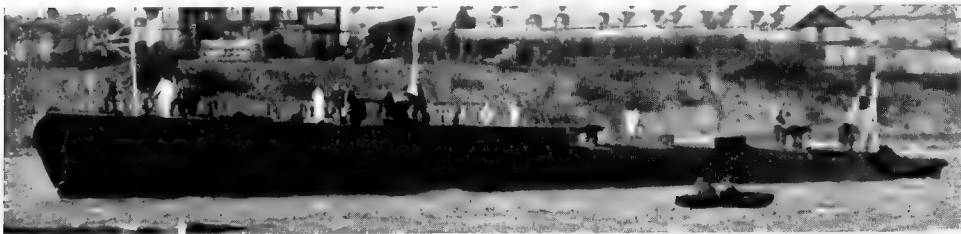
Notes.—Midget type. Used for training and instruction. XE 12 was cannibalised as spares, XE 8 scrapped 1952, XE 7 discarded 1953.

GREAT BRITAIN—Submarines

New Construction

Note.—It is officially stated that the construction of the new type of fast submarine is continuing satisfactorily and, in addition, a number of an interim type, with better performance than any predecessor, are being built. Three of latter, with conventional propulsion, reported to have been ordered from Cammell Laird & Co. Ltd., Birkenhead. Names reported are *Cachalot*, *Grampus* and *Porpoise*.

2 Experimental Type.



EXPLORER. 5th March 1954, Launched.

EXPLORER	Dimensions	178½ (pp.), 209½ (o.a.) × 15½ feet (official)
	Machinery :	Hydrogen Peroxide plant by Vickers-Armstrongs, Ltd.

Notes.—*Explorer*, built by Vickers-Armstrongs, Ltd., launched at Barrow-in-Furness, 5 Mar. 1954.—Of new streamlined type designed to operate at high underwater speeds. Her propulsive machinery is of novel design employing high test peroxide. Fitted with the latest submarine escape arrangements, including the one-man escape chamber, and equipped with the most recent submarine escape breathing apparatus for use by the ship's company in the event of emergency. First submarine to be launched for the Royal Navy since the completion of the "A" class submarines in 1948.

15 "A" Class.

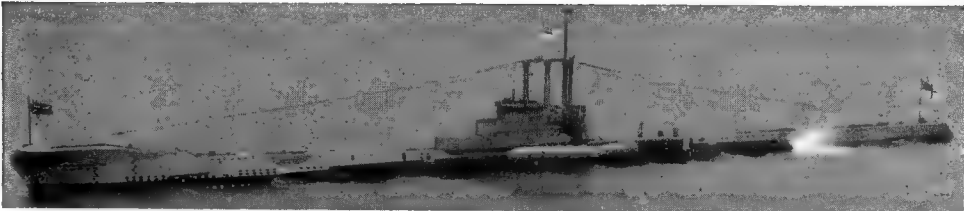
2 Cammell Laird	2 Scotts	10 Vickers-Armstrongs (Barrow)	AMPHION (ex-Anchorite)
ÆNEAS	ARTEMIS	ALCIDE	ANCHORITE (ex-Amphion)
ALARIC	ARTFUL	ALDERNEY	ANDREW
		ALLIANCE	ASTUTE
1 Chatham Dockyard		AMBUSH	AURIGA
			AUROCHS

ACHERON	Displacement :	1,120 tons standard, 1,385 tons surface, 1,620 tons submerged
	Dimensions :	279½ (pp.), 281½ (o.a.) × 22½ × 17 feet
	Guns :	1—4 inch, 7 M.G. (4-inch removed in some, see notes)
	Tubes :	8—21 inch, 4 bow and 4 stern, 2 being external, 20 torpedoes carried (or 26 mines).
	Machinery :	Surface torpedo tubes forward removed in most
		8 cyl. Diesels, B.H.P. : 4,300 = 18 kts. surface ;
		Electric motors. H.P. : 1,250 = 8 kts. submerged
	Oil fuel :	159 tons
	Complement :	60

General Notes.—These submarines are understood to have been designed for service in the Pacific, and have a different hull form from "T" type. Construction is entirely welded, and all possess "Snort" breathing equipment. *Alliance* and *Ambush*, so fitted, remained submerged for record periods in 1947-48. On 15 June, 1953, *Andrew* completed a 2,500 sea miles voyage under water from Bermuda to the English Channel in 15 days, a record for "snorting" in the Royal Navy. Following 30 units were cancelled, though some had actually been launched: *Abelard*, *Acasta*, *Acc*, *Achates*, *Adept*, *Admirable*, *Adversary*, *Agate*, *Aggressor*, *Agile*, *Aladdin*, *Alcestis*, *Andromache*, *Answer*, *Antaeus*, *Antagonist*, *Anzac*, *Aphrodite*, *Approach*, *Arcadian*, *Argent*, *Argosy*, *Asgard*, *Asperity*, *Assurance*, *Astarte*, *Atlantis*, *Austere*, *Awake*, *Aztec*. The *Affray* failed to surface in English Channel 17 April, 1951.

Appearance Notes.—*Acheron*, *Aeneas*, *Alaric*, *Alcide*, *Ambush*, *Artemis*, *Artful* and *Astute* have had the 4-inch gun removed. *Alderney* and *Amphion* have half shields to gun. The appearance of submarines, with or without guns, etc., is liable to change frequently and quickly according to operational and experimental requirements.

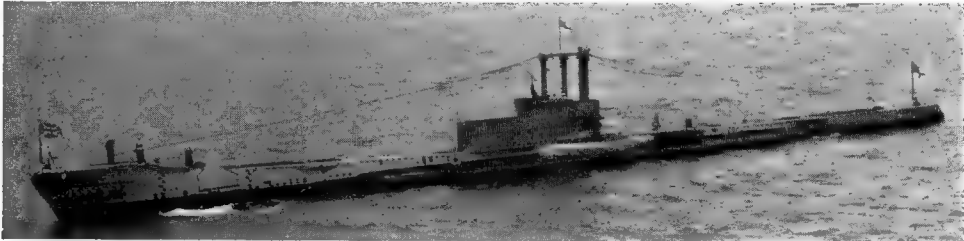
Name	Laid down	Launched	Completed	Name	Laid down	Launched	Completed
<i>Acheron</i>	26 Aug. 1944	25 Mar. 1947	17 Apr. 1948	<i>Anchorite</i>	19 July 1945	22 Jan. 1946	18 Nov. 1947
<i>Aeneas</i>	10 Oct. 1944	25 Oct. 1945	31 July 1946	<i>Andrew</i>	13 Aug. 1945	6 Apr. 1946	16 Mar. 1948
<i>Alaric</i>	31 May 1944	18 Feb. 1946	11 Dec. 1946	<i>Artemis</i>	28 Feb. 1944	26 Aug. 1946	15 Aug. 1947
<i>Alcide</i>	2 Jan. 1945	12 Apr. 1945	18 Oct. 1946	<i>Artful</i>	8 June 1944	22 May 1947	2 Feb. 1948
<i>Alderney</i>	6 Feb. 1945	25 June 1945	10 Dec. 1945	<i>Astute</i>	4 Apr. 1944	30 Jan. 1945	30 June 1945
<i>Alliance</i>	13 Mar. 1945	28 July 1945	14 May 1947	<i>Auriga</i>	7 June 1944	29 Mar. 1945	12 Jan. 1946
<i>Ambush</i>	17 May 1945	24 Sep. 1945	22 July 1947	<i>Aurochs</i>	21 June 1944	28 July 1945	7 Feb. 1947
<i>Amphion</i>	14 Nov. 1943	31 Aug. 1944	27 Mar. 1945				



ASTUTE. 1954, Skyfotos.



ARTFUL. 1954, Wright & Logan.



ALARIC. 1954, Skyfotos.



ANCHORITE. 1954, Skyfotos.

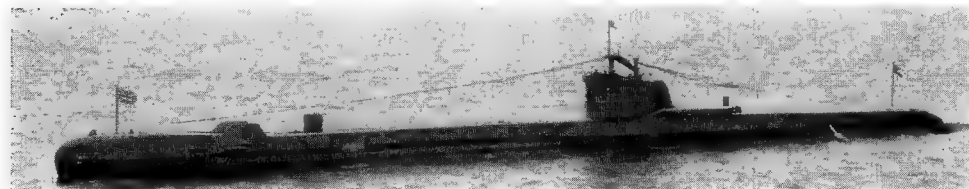


## 23 "T" Class.



TIRELESS.

1954, Skyfotos.



TRADEWIND.

1954, Skyfotos.

4 Chatham Dockyard    4 Devonport Dockyard    2 Portsmouth Dockyard    12 Vickers-Armstrongs (Barrow)

<b>THERMOPYLAE</b>	<b>THULE</b>	<b>TIRELESS</b>	<b>TACITURN</b>	<b>TELEMACHUS</b>
<b>TRADEWIND</b>	<b>TOTEM</b>	<b>TOKEN</b>	<b>TACTICIAN</b>	<b>TEREDO</b>
<b>TRENCHANT</b>	<b>TRUNCHEON</b>	<b>Talent (ex-Tasman)</b>	<b>TALENT</b>	<b>THOROUGH</b>
<b>TURPIN</b>	<b>TUDOR</b>	<b>TALLYHO</b>	<b>TAPIR</b>	<b>TIPTOE</b>
		<b>TAPIR (ex-Zeehond)</b>	<b>TRESPASSER</b>	
		<b>TAURUS</b>	<b>TRUMP</b>	
		<b>TABARD</b>		

Displacement : 1,090 tons standard, 1,321 tons surface, 1,571 tons submerged (increased in reconstructed boats)  
 Dimensions : 265 (pp.), 273½ (o.a.) × 26½ × 12 feet (285 (pp.), 300 (o.a.) in reconstructed boats)  
 Guns : 1—4 inch (none in reconstructed boats), 3 M.G.  
 Tubes : 11—21 inch (5 external), 17 torpedoes carried (Tradewind has only two bow tubes)  
 Machinery : Diesels, B.H.P. : 2,500 = 15 kts. surface; Electric motors, H.P. : 1,450 = 9 kts. submerged  
 Oil Fuel : 132/210 tons  
 Complement : 59

**General Notes.**—Officially described as "Patrol" type submarines, for general service. Saddle-tank design, with endurance equal to a 42-day patrol. All fitted with "Snort" equipment. External tubes removed in *Tireless*, *Token*, *Tradewind*, *Trunceon*, *Tudor*. Second World War losses: *Talisman*, *Tempest*, *Thorn*, *Thunderbolt* (ex-*Thetis*), *Tigris*, *Tarpon*, *Traveller*, *Trooper*, *Tetrarch*, *Thistle*, *Triad*, *Triton*, *Triumph*, *Turbulent*, *P.311*. Cancelled: *Talent* (1) (P.343), *Theban*, *Thor*, *Threat*, *Tiara*. Two, *Talent* (2) and *Tarn* were transferred to Royal Netherlands Navy. *Truculent* sank after collision in Thames Estuary, Jan. 12, 1950, salvaged March 14, scrapped April 5, 1950. *Tantalus*, *Tantivy*, *Templar*, discarded 1950. *Tactician*, *Telemachus* and *Thorough* are on loan to the Royal Australian Navy. Two lent to the Royal Netherlands Navy in June 1948 were returned to the Royal Navy in 1953, *Tapir* on July 16 and *Taurus* on December 8.

**Appearance Notes.**—*Tradewind* and others have been reconstructed, *Taciturn*, *Thermopylae*, *Tireless*, *Totem*, *Trunceon*, *Turpin*, rebuilt on similar lines to American "Guppy" type.

**Reconstruction Notes.**—There is a considerable difference between the "T" class "Conversions" (e.g. *Turpin*, *Taciturn*, *Thermopylae*) which are welded boats and have had an additional section of about 20 feet built into them, and the "T" class "Streamlines" (e.g. *Tireless*) which are riveted boats and therefore cannot undergo the full conversion. Underwater speed of *Tradewind*, *Turpin* and *Taciturn* (after reconstruction, streamlined hull, greater batteries) is 15 knots (unofficial).

Name	Laid down	Launched	Completed	Name	Laid down	Launched	Completed
<i>Tabard</i>	6 Sep. 1944	21 Nov. 1945	25 June 1946	<i>Tiptoe</i>	10 Nov. 1942	25 Feb. 1944	13 June 1944
<i>Taciturn</i>	9 Mar. 1943	7 June 1944	7 Oct. 1944	<i>Tireless</i>	30 Oct. 1941	19 Mar. 1943	18 Apr. 1945
<i>Tactician</i>	13 Nov. 1941	29 July 1942	29 Nov. 1942	<i>Token</i>	6 Nov. 1941	19 Mar. 1943	15 Dec. 1945
<i>Talent</i>	21 Mar. 1944	13 Feb. 1945	26 July 1945	<i>Totem</i>	22 Oct. 1942	28 Sep. 1943	9 Jan. 1945
<i>Tallyho</i>	25 Mar. 1942	23 Dec. 1942	11 Apr. 1943	<i>Tradewind</i>	11 Feb. 1942	11 Dec. 1942	18 Oct. 1943
<i>Tapir</i>	29 Mar. 1943	21 Aug. 1944	30 Dec. 1944	<i>Trenchant</i>	9 May 1942	24 Mar. 1943	26 Feb. 1944
<i>Taurus</i>	30 Sep. 1941	27 July 1942	3 Nov. 1942	<i>Trespasser</i>	8 Sep. 1941	29 May 1942	25 Sep. 1942
<i>Telemachus</i>	25 Aug. 1942	19 June 1943	25 Oct. 1943	<i>Trump</i>	31 Dec. 1942	25 Mar. 1944	9 July 1944
<i>Teredo</i>	17 Apr. 1944	27 Apr. 1945	5 Apr. 1946	<i>Trunceon</i>	5 Nov. 1942	22 Feb. 1944	25 May 1945
<i>Thermopylae</i>	26 Oct. 1943	27 June 1945	5 Dec. 1945	<i>Tudor</i>	20 Sep. 1941	23 Sep. 1942	16 Jan. 1944
<i>Thorough</i>	26 Oct. 1942	30 Oct. 1943	29 Feb. 1944	<i>Turpin</i>	24 May 1943	5 Aug. 1944*	18 Dec. 1944
<i>Thule</i>	20 Sep. 1941	22 Oct. 1942	13 May 1944				

\* Relunched 17 Feb. 1951



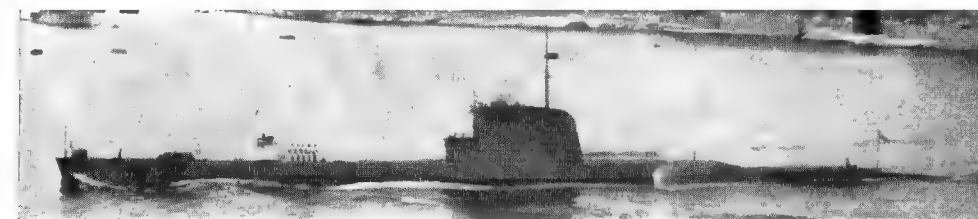
TRUNCHEON.

1954, Wright &amp; Logan.



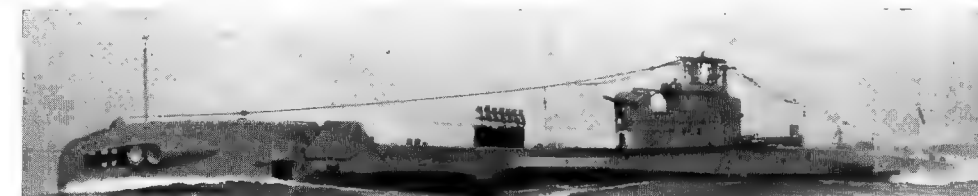
THERMOPYLAE.

1953, Wright &amp; Logan.



TOTEM.

1954, A. &amp; J. Pavia.



TRESPASSER.

1954, Wright &amp; Logan.

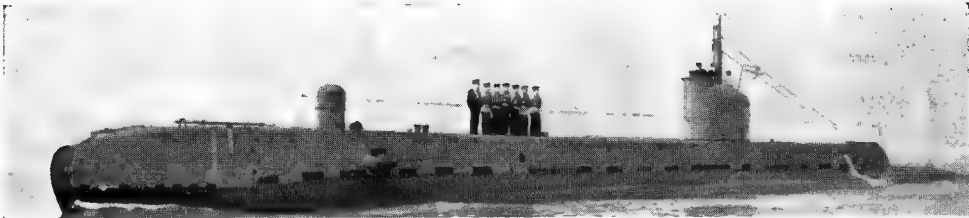
GREAT BRITAIN—Submarines

17 "S" Class.



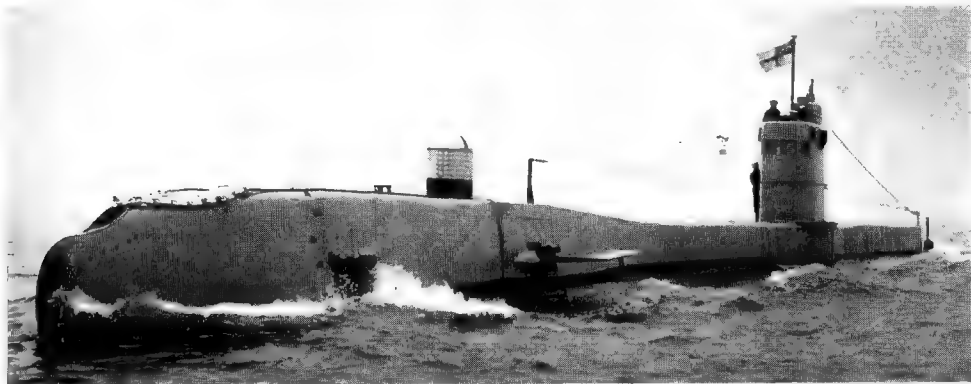
SCOTSMAN.

1954, Skyfotos.



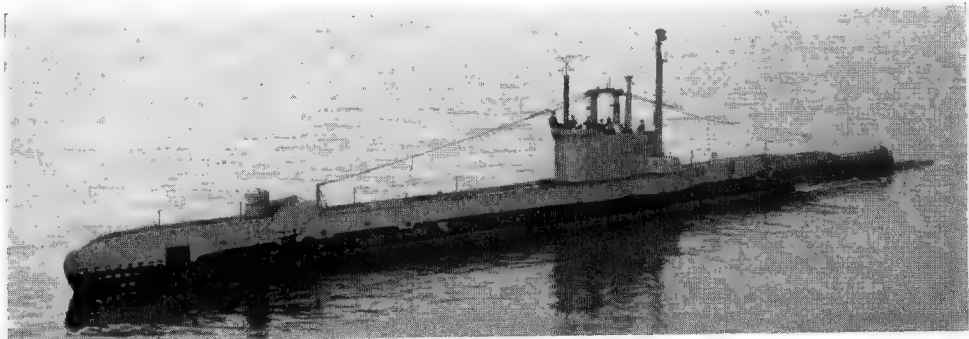
SOLENT

1954, Wright & Logan.



SCOTSMAN.

1950, Wright & Logan.



SENESCHAL. (Snort erected)

1953, Skyfotos.



SANGUINE. (Snort housed)

1952, A. & J. Pavia.



STURDY

1951, A. & J. Pavia.

10 Cammell Laird

SANGUINE  
SCORCHER  
SEA SCOUT  
SELENE

SIDON  
SLEUTH  
SOLENT  
SPRINGER  
STURDY  
SUBTLE

6 Scotts

SCOTSMAN  
SCYTHIAN  
SEA DEVIL  
SENESCHAL

SENTINEL  
SIRDAR (completed at Barrow)  
1 Vickers-Armstrongs (Barrow)  
SERAPH (ex-P 219)

Displacement: 715 tons standard, 814 tons surface, 1,000 tons submerged  
Dimensions: 202½ (pp.), 217 (o.a.) × 23½ × 10½ (mean) feet  
Guns: 1—3 inch or 1—4 inch (removed in some), 1—20 mm. AA.  
Tubes: 6—21 inch (bow), earlier units, 7, including 1 external. 13 torpedoes carried  
Machinery: Varies in detail (see notes). Diesels, B.H.P.: 1,900 = 14½ kts. surface :  
Electric motors, H.P.: 1,300 = 9 to 12 kts. submerged  
Oil Fuel: 44 tons  
Complement: 44

General Notes.—Very handy craft, capable of making a "crash-dive" in 30 seconds. Later units have slightly higher freeboard forward, some have 3 inch instead of 4 inch gun. Second World War losses : *Sahib*, *Saracen*, *Sickle*, *Simoon*, *Stonehenge*, *Stratagem*, *Sytis*, *Splendid*, *P 222*. Cancelled : *Sea Robin*, *Sprightly*, *Surface*, *Surge*. In 1948 *Saga*, *Spearhead* and *Spur* sold to Portuguese Navy. *Satyr*, *Spiteful*, *Sportsman* (lost 23 Sep. 1952) and *Statesman* transferred to French Navy, Oct. 1951, to July 1952.

Appearance Notes.—*Scotsman*, *Selene*, *Sturdy*, *Subtle* and others have been modified for experimental purposes. *Sanguine* and *Seneschal* have been modernised by removal of the gun and fitting of Snort, etc.

Name	Laid down	Launched	Completed	Name	Laid down	Launched	Completed
<i>Sanguine</i>	10 Jan. 1944	15 Feb. 1945	13 May 1945	<i>Seraph</i>	16 Aug. 1940	25 Oct. 1941	10 June 1942
<i>Scorcher</i>	14 Dec. 1943	18 Dec. 1944	16 Mar. 1945	<i>Sidon</i>	7 July 1943	4 Sep. 1944	23 Nov. 1944
<i>Scotsman</i>	15 Apr. 1943	18 Aug. 1944	9 Dec. 1944	<i>Sirdar</i>	24 Apr. 1941	26 Mar. 1943	18 Sep. 1943
<i>Scythian</i>	21 Feb. 1943	14 Apr. 1944	11 Aug. 1944	<i>Sleuth</i>	30 June 1943	6 July 1944	8 Oct. 1944
<i>Sea Devil</i>	5 May 1943	30 Jan. 1945	12 May 1945	<i>Solent</i>	7 May 1943	8 June 1944	7 Sep. 1944
<i>Sea Scout</i>	1 Apr. 1943	24 Mar. 1944	19 June 1944	<i>Springer</i>	8 May 1944	14 May 1945	2 Aug. 1945
<i>Selene</i>	16 Apr. 1943	24 Apr. 1944	14 July 1944	<i>Sturdy</i>	22 Dec. 1942	30 Sep. 1943	29 Dec. 1943
<i>Seneschal</i>	1 Sep. 1943	23 Apr. 1945	6 Sep. 1945	<i>Subtle</i>	1 Feb. 1943	27 Jan. 1944	16 Apr. 1944
<i>Sentinel</i>	15 Nov. 1943	27 July 1945	28 Dec. 1945				

# Submarines—continued.

## 2 "U" Class.



UPSTART.

1954, Wright &amp; Logan.

### UNTIRING (ex-Amfitriti, ex-Untiring)

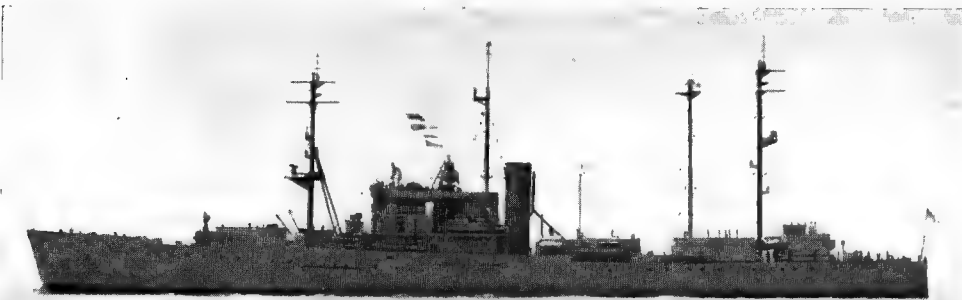
Displacement : 545 tons standard, 658 tons surface, 740 tons submerged  
Dimensions : 196½ (o.a.) × 16½ × 15 feet  
Guns : 1—3 inch, 3 M.G.  
Tubes : 4—21 inch (bow), 8 torpedoes carried  
Machinery : 2 Davey Paxman Diesels, B.H.P. : 615 — 11.25 kts. max. surface  
2 Electric motors. H.P. : 825 — 9 kts. max. submerged  
Oil fuel : 55 tons  
Complement : 33

### UPSTART (ex-Xifias, ex-Upstart)

Notes.—Lent to Royal Hellenic Navy 1943-46. Returned to Royal Navy 1952. Refitted 1953, both for service. Diesel electric drive.

Name	Builders	Laid down	Launched	Completed
Untiring	Vickers-Armstrongs, Ltd., (Tyne)	23 Dec. 1941	20 Jan. 1943	9 June 1943
Upstart	Vickers-Armstrongs, Ltd., (Barrow)	17 Mar. 1942	24 Nov. 1942	3 Apr. 1943

## Radar Training Ship.



BOXER

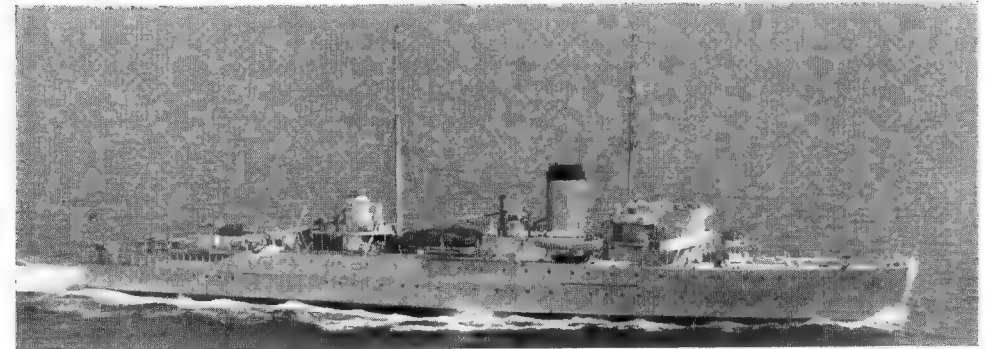
1951, C. Parsons, Esq.

Builders : Harland & Wolff, Ltd., Belfast  
Laid down : 31 July 1941  
Launched : 12 Dec. 1942  
Completed : 1 Aug. 1943

Displacement : 4,250 tons (6,240 tons full load)  
Dimensions : 390 (pp.), 400 (o.a.) × 49 × 17½ feet  
Guns : None at present  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 7,000 = 16 kts.  
Boilers : Foster-Wheeler "D" type  
Complement : 17 officers, 220 men + 50-80 under training.

Notes.—Originally built as a Tank Landing Ship, in which capacity she served. She was subsequently converted into a Fighter Direction Ship and after the war into a Radar Training Ship. Her equipment includes 24 high-power radar sets, i.e. installations equivalent to those carried in a fleet aircraft carrier, a cruiser, and two destroyers, and an unprecedented quantity of radio apparatus for various purposes. She is the only vessel in the Royal Navy with four masts, and is now a seagoing Radar Personnel Training Ship attached to the Navigation School. Thruster of this class is now Pelikaan in Royal Netherlands Navy.

## Netlayers.



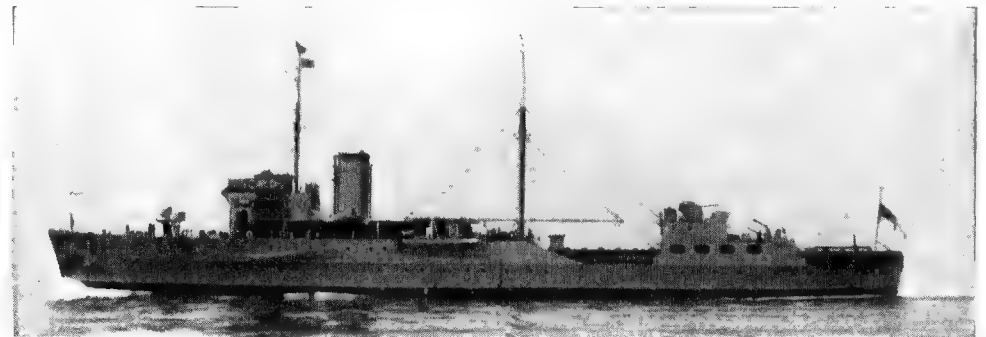
PROTECTOR

1953, Skyfotos.

Builders : Yarrow & Co., Ltd., Scotstoun  
Laid down : 15 Aug. 1935  
Launched : 20 Aug. 1936  
Completed : Dec. 1936

Displacement : 2,920 tons (3,610 tons full load)  
Dimensions : 310 (pp.), 338 (o.a.) × 50 × 11½ (mean) 15 (max.) feet  
Guns : 2—4 inch (twin mount), 8—20 mm. Oerlikons  
Machinery : Parsons geared turbines. (Re-engined 1945). S.H.P. : 9,000 = 20 kts.  
Boilers : 2 Admiralty 3-drum type  
Oil fuel : 690 tons  
Complement : 190

Notes.—Designed for Netlaying and Target Towing. Ordered under 1934 Estimates. Handier and faster ship than Guardian, her design embodying experience gained with that vessel. She has greater lifting power for dealing with nets.



GUARDIAN

1939, P. A. Vicary, Cromer.

Builders : H.M. Dockyard, Chatham  
Laid down : 15 Oct. 1931  
Launched : 1 Sept. 1932  
Completed : 13 June 1933

Displacement : 2,860 tons (3,665 tons full load)  
Dimensions : 310 (pp.), 338 (o.a.) × 53 × 15 (max.), 11½ (mean) feet  
Guns : 2—4 inch AA., 6—20 mm. AA., 6 Lewis M.G.  
Machinery : Parsons geared turbines by Wallsend Co. S.H.P. : 6,500 — 18 kts. (designed), now 16 kts.  
Boilers : 2 Admiralty 3-drum type  
Oil fuel : 720 tons  
Complement : 181

Notes.—Designed for Netlaying and Fleet Photography. The nets, sinkers and buoys are stowed to port and starboard, on upper deck from just forward of the main-mast under the fore-castle deck to the stern. The structure aft, placed on the deck spanning the nets, is the photographic cabin. This ship is very beamy in relation to her length, the ratio being 1 : 6 only.

GREAT BRITAIN—Ocean Minesweepers

Ocean Minesweepers.

63 "Algerine" Class.



RIFLEMAN.

1954, courtesy Godfrey H. Walker, Esq.

1 Fleming & Ferguson

14 Lobnitz

24 Redfern Construction Co.

COCKATRICE

15 Harland & Wolff

ACUTE  
ALBACORE  
CHAMELEON  
CHEERFUL  
ESPIEGLE  
HARE  
JEWEL  
MUTINE  
ONYX  
PICKLE  
PINCHER  
PLUCKY  
RECRUIT  
RIFLEMAN  
RINALDO

BRAMBLE  
FIERCE  
HOUND  
LENNOX  
NIGER (Minesweeping Headquarters Ship)  
ORESTES  
RATTLESNAKE  
ROWENA  
STORMCLOUD  
SYLVIA  
TANGANYIKA  
WATERWITCH  
WAVE  
WELCOME

9 Port Arthur Shipyards

LYSANDER (ex-Cornflower, ex-Lysander, ex-Hespeler)  
MARINER (ex-Kincardine)  
MARMION (ex-Orangeville)  
ORCADIA  
OSSORY  
PLUTO  
POLARIS  
PYRRHUS  
ROMOLA

COQUETTE (ex-Bowmanville)  
COURIER (ex-Arncliffe)  
GOLDEN FLEECE (ex-Humberstone)  
JASEUR  
LAERTES  
LIONESS (ex-Petrolia)  
MÆNAD  
MAGICIENNE  
MANDATE  
MARVEL  
MARY ROSE (ex-Toronto)  
MELITA  
MICHAEL  
MOON (ex-Mimico)  
MYRMIDON  
MYSTIC  
NERISSA  
PROVIDENCE (ex-Forest Hill)  
SEABEAR (ex-St. Thomas)  
SERENE (ex-Leaside)  
SKIPJACK (ex-Soleboy)  
THISBE  
TRUELOVE  
WELFARE

General Notes.—Largest and most efficient minesweepers in the Royal Navy. Frequently used as escort vessels. *Marvel* and *Pluto* attached to Vernon establishment. *Coquette*, *Mariner*, *Romola*, *Truelove*, *Wave* and *Welcome* are Fishery Protection Vessels. *Brave* and *Circe* are R.N.V.R. drillships for the Tyne and Tay Divisions, respectively. One ship sold to Siam, and two to S. African N. F. *Arcturus*, *Aries*, *Gozo* and *Lightfoot* transferred to Royal Hellenic Navy. *Fly* transferred to Persia in 1949. *Flying Fish* transferred to Ceylon Government Sept. 1949. *Cadmus*, *Fancy*, *Liberty*, *Ready*, *Rosario* and *Spanker* transferred to Belgian Navy 1949-53. *Niger* converted into Minesweeping Headquarters Ship in 1949. *Larne* transferred to Italy. Cancelled ships: *Happy Return*, *Nicator*, *Nox*, *Styx*. War losses: *Alarm*, *Algerine*, *Loyalty*, *Regulus*, *Squirrel*, *Vestal*. *Fantome*, *Mameluke*, *Prompt*, *Hydra*, *Octavia* and *Felicity* scrapped. Name of *Lysander* changed to *Cornflower* 1950 on allocation to Hong Kong R.N.V.R., reverted to *Lysander* 1951. *Brave* renamed *Satelite*.

Appearance Notes.—Gunhouse in *Romola*, *Truelove*, *Wave*. Squid in *Pluto* instead of 4-inch gun. *Coquette*, Senior Officer, Fishery Protection, now has a deckhouse abaft the funnel in place of the rangefinder platform. *Fierce* employed as S.O. ship of M/S flotillas has extra deckhouse aft.



PLUTO.

1953, Skyfotos

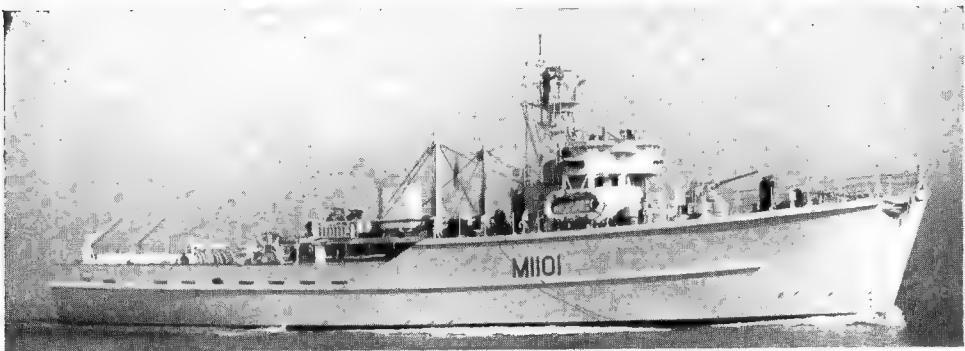
Displacement : 950 to 1,040 tons (1,225, *Niger* 1,245, to 1,335 tons full load)  
Dimensions : 225 (pp.), 235 (o.a.) × 35½ × 10½ to 11½ (max.) feet  
Guns : 1—4 inch, 4—40 or 6 to 8—20 mm. AA. (*Niger*, 1—4 inch, 4—40 mm., 2—20 mm. AA.)  
A/S Weapons : 4 D.C.T. (1 squid in *Pluto*, instead of 4-inch gun, see photo). *Niger* 2 D.C.T.  
Machinery : Geared turbines in Blyth and Harland & Wolff ships; triple expansion in others  
2 shafts. H.P. : 2,000 (*Niger* 1.H.P. : 2,400) = 16.5 kts.  
Boilers : 2, of 3-drum type  
Oil fuel : 235 tons  
Complement : 95 (peace) ; 104 to 138 (war)

Name	Laid down	Launched	Completed	Name	Laid down	Launched	Completed
<i>Acute</i>	24 July 1941	14 Apr. 1942	30 July 1942	<i>Mystic</i>	9 Aug. 1944	11 Nov. 1944	...
<i>Albacore</i>	24 July 1941	2 Apr. 1942	16 June 1942	<i>Nerissa</i>	30 Aug. 1944	25 Nov. 1944	...
<i>Bramble</i>	30 June 1944	26 Jan. 1945	28 June 1945	<i>Niger</i>	5 Nov. 1944	1 May 1945	21 Sep. 1945
<i>Chameleon</i>	20 Aug. 1943	6 May 1944	14 Sep. 1944	<i>Onyx</i>	24 Nov. 1941	27 Oct. 1942	26 Mar. 1943
<i>Cheerful</i>	20 Aug. 1943	22 May 1944	13 Oct. 1944	<i>Orcadia</i>	19 Nov. 1943	8 Aug. 1944	...
<i>Cockatrice</i>	29 Dec. 1941	27 Oct. 1942	10 Apr. 1943	<i>Orestes</i>	27 Mar. 1942	25 Nov. 1942	10 Apr. 1943
<i>Coquette</i>	9 Aug. 1943	24 Nov. 1943	...	<i>Ossory</i>	20 Nov. 1943	3 Oct. 1944	...
<i>Courier</i>	7 Sep. 1943	22 Dec. 1943	...	<i>Pickle</i>	11 Jan. 1943	3 Aug. 1943	15 Oct. 1943
<i>Espiegle</i>	5 Feb. 1942	12 Aug. 1942	1 Dec. 1942	<i>Pincher</i>	11 Jan. 1943	19 Aug. 1943	12 Nov. 1943
<i>Fierce</i>	26 Nov. 1944	11 Sep. 1945	28 Nov. 1945	<i>Plucky</i>	20 Apr. 1943	29 Sep. 1943	10 Dec. 1943
<i>Golden Fleece</i>	25 Oct. 1943	29 Feb. 1944	...	<i>Pluto</i>	18 Jan. 1944	21 Oct. 1944	...
<i>Hare</i>	27 Nov. 1943	20 June 1944	10 Nov. 1944	<i>Polaris</i>	15 May 1944	13 Dec. 1944	...
<i>Hound</i>	2 Dec. 1941	29 July 1942	11 Dec. 1942	<i>Providence</i>	17 Apr. 1943	27 Oct. 1943	...
<i>Jaseur</i>	27 Dec. 1943	19 Apr. 1944	...	<i>Pyrrhus</i>	22 June 1944	19 May 1945	...
<i>Jewel</i>	27 Nov. 1943	20 July 1944	9 Dec. 1944	<i>Rattlesnake</i>	5 June 1942	23 Feb. 1943	23 June 1943
<i>Laertes</i>	20 Jan. 1944	25 Mar. 1944	2 Mar. 1945	<i>Recruit</i>	20 Apr. 1943	26 Oct. 1943	14 Jan. 1944
<i>Lennox</i>	3 Mar. 1943	15 Oct. 1943	18 Jan. 1944	<i>Rifleman</i>	20 Apr. 1943	25 Nov. 1943	11 Feb. 1944
<i>Lioness</i>	10 Nov. 1943	15 Mar. 1944	11 Dec. 1944	<i>Rinaldo</i>	22 Sep. 1942	20 Mar. 1943	18 June 1943
<i>Lysander</i>	3 June 1943	11 Nov. 1943	21 Nov. 1944	<i>Romola</i>	16 Mar. 1944	19 May 1945	...
<i>Mænad</i>	1 Mar. 1944	8 June 1944	...	<i>Rowena</i>	29 Oct. 1943	5 June 1944	6 Sep. 1944
<i>Magicienne</i>	19 Feb. 1944	24 June 1944	...	<i>Seabear</i>	12 July 1943	6 Nov. 1943	...
<i>Mandate</i>	1 Apr. 1944	9 Aug. 1944	22 Mar. 1945	<i>Serene</i>	19 July 1943	18 Oct. 1943	...
<i>Mariner</i>	26 Aug. 1943	9 May 1944	...	<i>Skipjack</i>	19 Nov. 1942	7 Apr. 1943	...
<i>Marmion</i>	30 Aug. 1943	15 June 1944	...	<i>Stormcloud</i>	4 May 1943	28 Dec. 1943	28 Mar. 1944
<i>Marvel</i>	19 Apr. 1944	30 Aug. 1944	...	<i>Sylvia</i>	5 July 1943	28 Feb. 1944	17 May 1944
<i>Mary Rose</i>	25 Feb. 1943	5 Aug. 1943	...	<i>Tanganyika</i>	20 Sep. 1943	12 Apr. 1944	7 July 1944
<i>Melita</i>	...	8 Dec. 1942	...	<i>Thisbe</i>	14 Dec. 1942	12 Apr. 1943	...
<i>Michael</i>	25 Apr. 1944	20 Sep. 1944	...	<i>Truelove</i>	7 Jan. 1943	8 July 1943	...
<i>Moon</i>	23 Mar. 1943	2 Sep. 1943	...	<i>Waterwitch</i>	15 Aug. 1942	22 Apr. 1943	6 Aug. 1943
<i>Mutine</i>	24 Nov. 1941	10 Oct. 1942	26 Feb. 1943	<i>Wave</i>	17 Mar. 1944	18 Aug. 1944	14 Nov. 1944
<i>Myrmidon</i>	19 July 1944	21 Oct. 1944	...	<i>Welfare</i>	8 Feb. 1943	15 July 1943	...
				<i>Welcome</i>	3 May 1944	14 Nov. 1944	20 Jan. 1945



Coastal Minesweepers.

81 "Ton" Class (New Construction) M 1101 Series.



CONISTON. 1953, courtesy J. I. Thornycroft & Co., Ltd. (Builders).

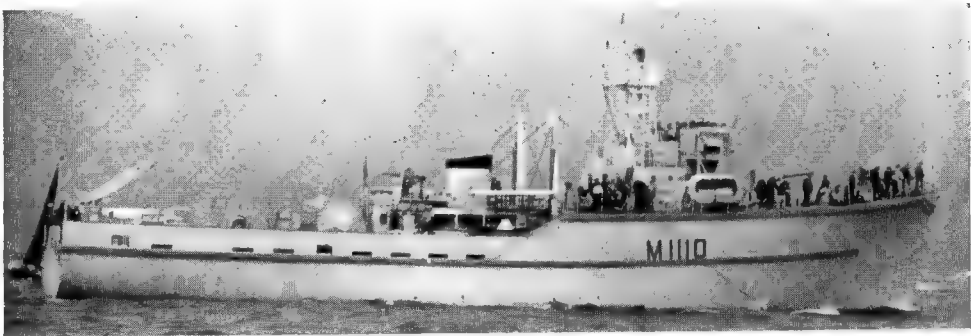
ALCASTON	DUNKERTON	LALESTON
AMERTON	EDDERTON	LANTON
APPLETON	EMBLETON	LETTERSTON
BEACHAMPTON	ESSINGTON	LEVERTON
BEVINGTON	FENTON	LISTON
BICKINGTON	FITTLETON	LULLINGTON
BILDESTON	FLOCKTON	MADISTON
BLAXTON	FLORISTON	MAXTON
BOULSTON	GAMSTON	NURTON
BRERETON	GAVINTON	OSSINGTON
Brinton	GLASSERTON	OULSTON
BROWINGTON	HAZLETON	PENSTON
BURNASTON	HEXTON	PICTON
BUTTINGTON	HIGHBURTON	PILSTON
CALTON	HICKLETON	PITTINGTON
CARHAMPTON	HODGESTON	POLLINGTON
CAUNTON	HUBBERSTON	PUNCHESTON
CHEDISTON	ILMINGTON	RODDINGTON
CHILCOMPTON	ILSTON	SEFTON
CLARBESTON	INVERMORISTON	SHAVINGTON
CONISTON	IVESTON	SHOULTON
CRICHTON	JACKTON	SINGLETON
CUXTON	KEDLESTON	SULLINGTON
DALSWINTON	KELLINGTON	SWANSTON
DARLASTON	KELTON	THAMES (ex-Alverton)
DERRITON	KEMERTON	THANKERTON
DUFTON	KIRKLISTON	WARSASH (ex-Alfriston)

Displacement :	360 tons
Dimensions :	140 (pp.), 152 (o.a.) x 28½ feet
Guns :	1—40 mm. Bofors AA. forward, 2—20 mm. AA. aft
Machinery :	Diesels. 2 shafts. 15 kts. (max.)
Complement :	26 (39 war)

Notes.—Officially announced that the main machinery of these vessels will be manufactured by Mirrlees, Bickerton & Day, Ltd., Stockport, but also officially announced that the allocation of machinery between these ships is provisional and may be subject to modification. High speed diesels, incorporating the best of wartime MMS and BYMS features and like the MMS aft. Twin screw and double mahogany hull. Generators replace the batteries carried in the MMS type of sweeper. These ships were to have been named after birds or insects but subsequently reverted to numbers, and finally were named after villages. Coniston, the first vessel of the class to be completed (see photo), was accepted into H.M. service in February 1953. Alfriston was renamed Warsash in 1954 and allocated to the Solent Division R.N.V.R. and Alverton was renamed Thames on 8 June, 1954 and allocated to the London Division R.N.V.R.



APPLETON. 1954, Skyfotos.



BILDESTON. 1954, C. Parsons.

6 J. I. Thornycroft & Co., Ltd., Woolston, Southampton	4 Harland & Wolff, Ltd., Belfast
5 Camper & Nicholsons, Ltd., Southampton	6 Cook, Welton & Gemmel, Ltd., Beverley, East Yorks.
3 Camper & Nicholsons, Ltd., Gosport	6 Fleetlands Shipyard, Ltd., Gosport
4 Goole Shipbuilding & Engineering Co., Ltd., Goole	2 Wivenhoe Shipyard, Ltd., Wivenhoe, Essex.
8 Whites Shipyard (Southampton), Ltd., Itchen, Southampton	4 Montrose Shipyard, Ltd., Montrose, Angus
8 J. S. Doig (Grimsby), Ltd., Grimsby	2 Herd & MacKenzie, Buckie, Banffshire
6 Richards Ironworks, Ltd., Lowestoft	1 The Dorset Yacht Co., Ltd., Hamworthy, Dorset
2 William Pickersgill & Sons Ltd., Southwick, Sunderland	2 Philip & Son, Ltd., Dartmouth

GREAT BRITAIN—Inshore Minesweepers

Inshore Minesweepers.

63 "Ham" Class (New Construction) M 2601 Series.

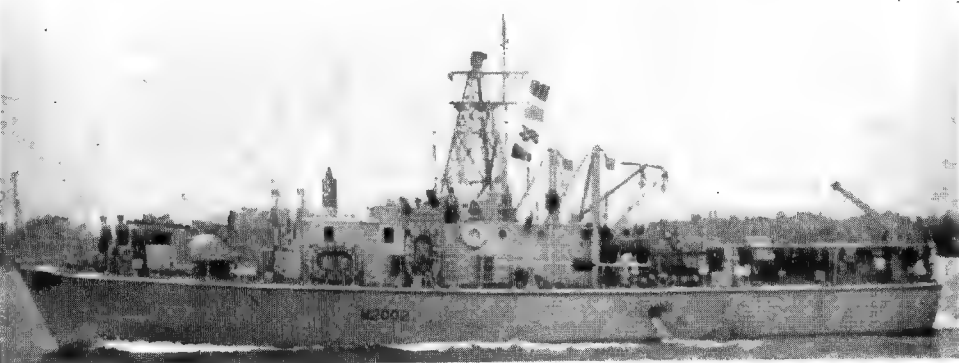


INGLESHAM.

1953. Wright & Logan.

- |             |            |            |             |
|-------------|------------|------------|-------------|
| ALTHAM      | COBHAM     | GREETHAM   | PAGHAM      |
| ARLINGHAM   | CRANHAM    | HALSHAM    | PETERSHAM   |
| ASHELDHAM   | DAMERHAM   | HARPHAM    | PINEHAM     |
| BASSINGHAM  | DARSHAM    | HAVERSHAM  | PULHAM      |
| BEDHAM      | DAVENHAM   | HILDERSHAM | RENDELSHAM  |
| BISHAM      | DOWNHAM    | HOVINGHAM  | RIPLINGHAM  |
| BLUNHAM     | DITTISHAM  | INGLESHAM  | SHRIVENHAM  |
| BODENHAM    | ELSENHAM   | ISHAM      | SIDLESHAM   |
| BOREHAM     | ETCHINGHAM | LASHAM     | STEDHAM     |
| BOTTISHAM   | FRETENHAM  | LEDHAM     | SPARHAM     |
| BRANTINGHAM | EVERINGHAM | LITTLEHAM  | SULHAM      |
| BRIGHAM     | FELMERSHAM | LUDHAM     | TIBBENHAM   |
| BUCKLESHAM  | FLINTHAM   | MERSHAM    | TRESHAM     |
| CARDINHAM   | FRITHAM    | MICKLEHAM  | WARMINGHAM  |
| CHELHAM     | GLENTHAM   | MILEHAM    | WEXHAM      |
| CHILLINGHAM |            | OCKHAM     | WHIPPINGHAM |

11 "Ley" Class (New Construction) M 2001 Series.



AVELEY.

1954. J. W. Kennedy.

- |           |          |          |         |
|-----------|----------|----------|---------|
| AVELEY    | BRINKLEY | BROOMLEY | CRADLEY |
| BREARLEY  | BROADLEY | BURLEY   | DINGLEY |
| BRENCHLEY |          | CHAILEY  | EDGELEY |

"Ham" and "Ley" Classes—Continued.

Displacement : c. 100 tons (120 tons full load)  
Dimensions : 100 (pp.), 106½ (o.a.) × 21½ feet  
Guns : 1—40 mm. Bofors AA. forward  
Machinery : Diesel  
Complement : 13

Notes.—Officially announced that the main machinery of most of these vessels will be manufactured by Davey Paxman & Co., Ltd., Colchester, or by Ruston & Hornsby, Ltd., Lincoln, under licence from Davey Paxman, two by H.M. Dockyard, Chatham, and one by The English Electric Co., Ltd., Stafford. Designed to operate in shallow waters, such as rivers and estuaries. They are an entirely new type of vessel and they embody novel features resulting from lessons learned during the war and in the course of subsequent developments. Were to have been named after insects, with a colour before the actual species, but were then known by numbers and finally named after villages. First inshore minesweeper, the *Inglesham* (see photo), was launched by J. Samuel White & Co., Ltd., Cowes, 23 April 1952. "Ham" class are of wooden construction and "Ley" class of composite construction. In addition to the 63 vessels above, a number of inshore minesweepers will be built in British yards under the United States Navy's off-shore procurement programme for allocations to N.A.T.O. countries, the contract being signed on 13 March 1953. First launched 5 April 1954.

37 Converted Minesweeping Motor Launches.



ML 2912.

1954. Wright & Logan.



ML 2576.

1951. A. & J. Pavia.

- |         |         |         |         |         |         |         |         |         |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| ML 2154 | ML 2220 | ML 2250 | ML 2357 | ML 2489 | ML 2567 | ML 2576 | ML 2585 | ML 2866 |
| ML 2155 | ML 2221 | ML 2337 | ML 2360 | ML 2491 | ML 2568 | ML 2577 | ML 2586 | ML 2882 |
| ML 2196 | ML 2223 | ML 2338 | ML 2461 | ML 2493 | ML 2571 | ML 2581 | ML 2592 | ML 2886 |
| ML 2217 | ML 2248 | ML 2342 | ML 2462 | ML 2564 | ML 2575 | ML 2583 | ML 2593 | ML 2901 |
|         |         |         |         |         |         |         |         | ML 2921 |

Displacement : 85 tons  
Dimensions : 112 × 18½ × 5 (max.) eet  
Machinery : 2 Hall-Scott Defender engines. B.H.P. : 1,200 = 20 kts. Sea speed 15.5 kts.  
Complement : 16 to 18

Notes.—2,000 added to original numbers. Motor Launches converted into Inshore Minesweepers. ML 2592 is Mine Location Vessel.

Motor Minesweepers.

18 "126"-ft. Type. 1001 Series.



MMS 1077.

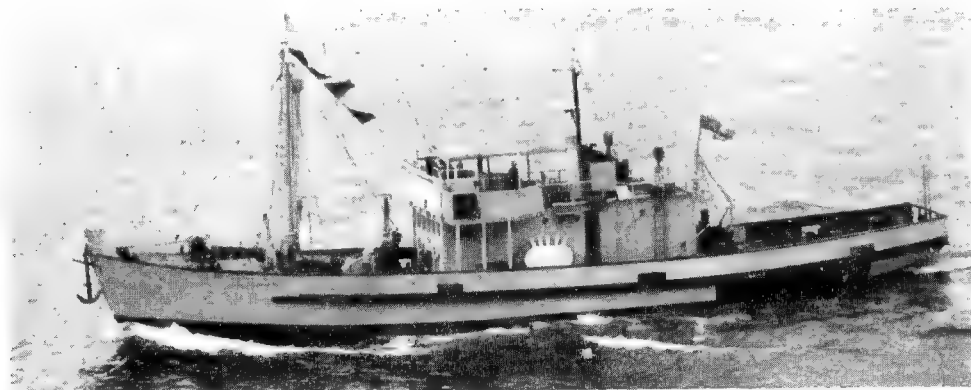
1953, Skyfotos.

MMS 1002	MMS 1011	MMS 1030	MMS 1042	MMS 1060	MMS 1077
MMS 1003	MMS 1017	MMS 1034	MMS 1044	MMS 1061	MMS 1089
MMS 1004	MMS 1020	MMS 1038	MMS 1048	MMS 1075	MMS 1090

Displacement : 254 tons (360 tons full load)  
Dimensions : 126 (pp.), 139½ (o.a.) × 26 × 10½ (mean), 12½ (max.) feet  
Guns : 2—20 mm. AA., 2 M.G.  
Machinery : Diesel B.H.P. : 500 = 10 kts.  
Complement : 21

Notes.—"1,001" Series. Built of wood. MMS 1017, 1030, 1034, 1048, 1060, 1075, 1077, 1089, 1090 are employed as seagoing tenders to R.N.V.R. Divisions, and named *Curzon*, *Humber*, *Kilmorey*, *Graham*, *Mersey*, *St. Mungo*, *Montrorse*, *Killiecrankie*, *Bernicia*, respectively. MMS 1002, 1003, 1004, 1011 (wears Blue Ensign), converted to special duty as mobile wiping/deperming units. MMS 1020 returned 1954 by Belgium to whom she had been lent.

Ex-Motor Minesweeper.



TRV 20.

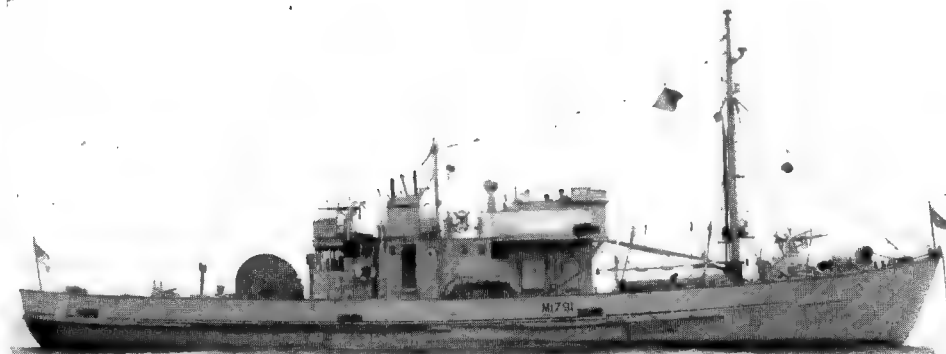
1954, A. & J. Pavia.

TRV 20 (ex-MMS 1510)

Notes.—Torpedo Recovery Vessel. Main particulars similar to the smaller motor minesweepers of the 1,500 to 1,800 series, see top right.

Motor Minesweepers—continued.

52 "105 ft." Type. 1501 Series.



MMS 1791.

1952, P. A. Vicary

AMBER (ex-MMS 222)	MMS 1556	MMS 1604	MMS 1685	MMS 1785
MMS 1501	MMS 1557	MMS 1605	MMS 1717	MMS 1786
MMS 1505	MMS 1579	MMS 1606	MMS 1728	MMS 1789
MMS 1532	MMS 1583	MMS 1609	MMS 1733	MMS 1790
MMS 1534	MMS 1584	MMS 1610	MMS 1736	MMS 1791
MMS 1535	MMS 1586	MMS 1635	MMS 1761	MMS 1796
MMS 1536	MMS 1599	MMS 1644	MMS 1763	MMS 1797
MMS 1546	MMS 1600	MMS 1667	MMS 1772	MMS 1801
MMS 1548	MMS 1602	MMS 1672	MMS 1775	MMS 1807
MMS 1550	MMS 1603	MMS 1681	MMS 1783	MMS 1810
MMS 1553				MMS 1813

Displacement : 163 tons (255 tons full load)  
Dimensions : 105 (pp.), 119 (o.a.) × 23 × 9½ feet  
Guns : 2—20 mm. AA., 2 M.G.  
Machinery : Diesel. B.H.P. : 500 = 10 kts.  
Complement : 20

Notes.—Built of wood. 1,500 added to original numbers. Amber used on ferry service in Bermuda. MMS 1733, 1761, 1785 and 1789 were employed as tenders to South Wales, Severn and London R.N.V.R. Divisions, and named *St. David*, *Venturer*, *Isis* and *Thames* respectively. MMS 1717 is Mine Location Vessel. *Jade* (ex-MMS 223) sank in storm south-east of Bermuda, 25 Feb. 1951. MMS 1501, 1505, 1546, 1553, 1558, 1644, 1810 and 1813 were returned by Greece in 1952. MMS 1558 caught fire and sank in English Channel 17 April 1954. MMS 182, 187, 188, 189, 191, 193 and 266 were returned 1954 by Belgium to whom they had been lent. MMS 1569, 1724, 1771, 1778, 1794 discarded 1954.

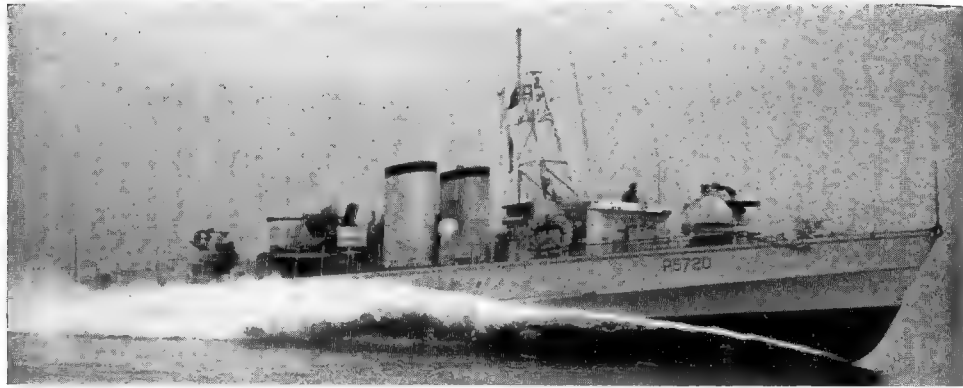
Torpedo Recovery Vessels.

TRV 1	TRV 2	TRV 3	TRV 4	TRV 5	TRV 6	TRV 7	TRV 8
-------	-------	-------	-------	-------	-------	-------	-------

Note.—TRV 2 and TRV 8 are on charter to private firms.

GREAT BRITAIN—Fast Patrol Boats

**Fast Patrol Boats.**  
2 "Bold" Experimental Prototypes.  
(Convertible Gunboats or Torpedo Boats.)



**BOLD PATHFINDER** (as gunboat).  
**BOLD PATHFINDER** (ex-MTB 5720) 1953, courtesy Messrs. Vosper Ltd. (Builders).

Builders : Vosper Ltd., Portsmouth  
Launched : 17 Sep. 1951  
Completed : July, 1953  
Displacement : 130 tons  
Dimensions : 117 (pp.), 122½ (o.a.) × 20½ × 6½ feet  
Guns : 2—4.5 inch, new type 25 cal. : 1—40 mm. Bofors AA. (as gunboat)  
Tubes : 4—21 inch (as torpedo boat) with 1—40 mm. Bofors AA.  
Machinery : 2 G.2 gas turbines. S.H.P. : 9,000 in combination with 2 diesels. B.H.P. : 5,000  
Complement : 20

Notes.—Experimental development of M.T.B. type largely of light alloy construction with round bilge hull form and twin funnels of almost square section. 4 screws and 4 rudders. Engines manufactured by Metropolitan-Vickers Electrical Co., Ltd. Cost £370,500.



**BOLD PIONEER** (as gunboat).  
**BOLD PIONEER** (ex-MTB 5701) 1953, Wright & Logan.

Builders : J. Samuel White & Co., Ltd., (Cowes), Isle of Wight  
Launched : 18 Aug. 1951  
Completed : Jan. 1953  
Displacement : 130 tons  
Dimensions : 116½ (pp.), 121 (o.a.) × 25½ × 6½ feet  
Guns : 2—4.5 inch, 1—40 mm. AA. (as gunboat)  
Tubes : 4—21 inch (as torpedo boat) with 1—40 mm. AA.  
Machinery : 2 G.2 Metropolitan-Vickers Gas Turbines. S.H.P. : 9,000 and 2 Diesel Engines. B.H.P. : 5,000  
Complement : 18

Notes.—Experimental twin-gas-turbine propelled torpedo boat largely of timber construction with hard chine hull form and round twin funnels. Novel main machinery arrangement. The gas turbines were developed from the Gatric engine. Cost £292,000. Above two craft are interchangeable as MTB or MGBs.

**Fast Patrol Boats—continued.**

12 "Gay" Class.  
(Interchangeable Motor Gunboats and Motor Torpedo Boats.)



**GAY BOMBARDIER** (as Motor Torpedo Boat). 1953, courtesy Messrs. Vosper Ltd.



**GAY BOMBARDIER** (as Motor Gunboat). 1953, courtesy Messrs. Vospers, Ltd.

<b>GAY ARCHER</b> <b>GAY BOMBARDIER</b> <b>GAY BOWMAN</b>	<b>GAY BRUISER</b> <b>GAY CARIBINEER</b> <b>GAY CAVALIER</b>	<b>GAY CENTURION</b> <b>GAY CHARGER</b> <b>GAY CHARIOTEER</b>	<b>GAY DRAGON</b> <b>GAY FENCER</b> <b>GAY FORESTER</b>
---	--	---	---

Displacement : ca 50 tons  
Dimensions : 71½ (pp.), 75½ (o.a.) × 20½ × 4½ feet  
Guns : 1—4.5 inch for'd. (as gunboat), 1—40 mm. AA. aft.  
Tubes : 2—21 inch (as torpedo boat) with 2—40 mm. AA.  
Machinery : Packard engines  
Complement : 13

Notes.—Short motor torpedo boats. As gunboats have new type short 4.5 inch forward (25 calibres). Almost entirely of wooden construction. The hull incorporates structural members of water resistant plywood. Completed 1953. Cost £78,200 to £100,000 each.



## 17 "Dark" Class.

(Convertible Motor Torpedo Boats/Motor Gun Boats)

**DARK ADVENTURER**   **DARK BOWMAN**   **DARK CHIEFTAIN**   **DARK FIGHTER**   **DARK HORSEMAN**  
**DARK ANTAGONIST**   **DARK CAVALIER**   **DARK DEFENDER**   **DARK GLADIATOR**   **DARK HUNTER**  
**DARK ATTACKER**   **DARK CHASER**   **DARK EXPLORER**   **DARK HERO**   **DARK INTRUDER**  
**DARK AVENGER**

Dimensions: 67 (pp.), 71½ (o.a.) × 19-½ × 5 feet  
 Armament: As M.G.B.: 1—4.5 inch gun, 1—40 mm. AA. gun (or 2—40 mm. AA. guns)  
 As M.T.B.: 4—21 inch torpedo tubes, 1—40 mm. AA. gun  
 Machinery: Napier Deltic diesel. S.H.P.: 2,500.

Notes.—Dark Hunter, launched 18 Mar. 1954, was the first of a new class powered by the Napier Deltic engine which has a very high performance, and takes the form of an opposed piston two-stroke cycle engine constructed in triangular form with three crankshafts, an arrangement new to engineering. Boats are of composite construction, aluminium being used for all the framing and deck



FB 5516.

1954, Wright &amp; Logan.



FB 5513.

1951, Skyfotos.

FB 5513 (ex-MTB 2013)

FB 5516 (ex-MTB 2016)

FB 5518 (ex-MTB 2018)

Displacement: 93 tons (113 tons full load)  
 Dimensions: 117 × 22½ × 4½ (max.) feet  
 Guns: 2—6 pdr., 6—20 mm. AA. (5516 2—20 mm. AA. amidships, 1 rocket projector)  
 Tubes: 4—18 inch  
 Machinery: 3 V12 Packard engines, supercharged. 3 shafts. B.H.P.: 4,050 = 31 kts. Sea speed: 26 kts.  
 Complement: 30

Notes.—Long torpedo boats, Camper & Nicholsons Type. FB 5511, 5512, 5514, 5515, 5517 scrapped in 1954.

## Fast Patrol Boats—continued.



FB 5020.

1954, Wright &amp; Logan.

FB 5002 (ex-MTB 5002)

FB 5008 (ex-MTB 5008)

FB 5009 (ex-MTB 5009)

FB 5015 (ex-MTB 5015)  
 FB 5020 (ex-MTB 5020)

Displacement: 102 tons (118 tons full load)  
 Dimensions: 115 (o.a.) × 21½ × 5½ feet  
 Guns: 2—6 pdr., 2—20 mm. AA., 1 or 2 rocket projectors (FB 5008 has 4.5 inch)  
 Tubes: 2—21 inch  
 Machinery: 4 Packard engines. B.H.P.: 5,000 = 30 kts. Sea speed: 27 kts.  
 Complement: 30

Notes.—Long motor torpedo boats, modified Fairmile "D" Type. FB 5008 has mounted two short 4.5 inch guns, one forward and one aft. FB 5009 mounts experimentally a 17-pdr. gun. No M.G.s carried in peace time. FB 5005 and FB 5007 scrapped in 1954



FB 5035.

1954, Wright &amp; Logan.

FB 5001 (ex-MTB 780)

FB 5031 (ex-MTB 758)

FB 5032 (ex-MTB 779)  
 FB 5033 (ex-MTB 785)

FB 5035 (ex-MTB 793)  
 FB 5036 (ex-MTB 794)

Displacement: 102 tons (118 tons full load)  
 Dimensions: 115 (o.a.) × 21½ × 5 feet  
 Guns: 2—6 pdr. (forward and aft), 2—20 mm. AA., 8 M.G. (not now mounted)  
 Tubes: 4—18 inch  
 Machinery: 4 Packard engines. B.H.P.: 5,000 = 29 kts. Sea speed: 25 kts.  
 Complement: 30

Notes.—Long motor torpedo boats, Fairmile "D" type. Original displacement (on trials) was 91 tons, later much increased, FB 5001 has reversible twin screws. FB 5036 mounts 2—4.5 inch guns. FB 5003 and FB 5037 scrapped in 1954. Of other boats of this type MTB 756 is attached to Humber Division, R.N.V.R., at Hull, and MTB 727, 730, 761, 772, 775 (hulls) are attached to Sea Cadet Corps at Richmond, Thames, Chelmsford, Chelsea and London.

## GREAT BRITAIN—Fast Patrol Boats

### Fast Patrol Boats—continued.



FPB 1601.

1954, Wright & Logan.

**FPB 1601** (ex-MGB 538, ex-MTB 538)

Displacement: 36 tons (45 tons full load)  
 Dimensions: 74½ (o.a.), 68 (pp.) × 20½ × 6 feet  
 Guns: 1—4.5 inch forward, 2—20 mm. AA. aft (as gunboat)  
 Tubes: 4—18 inch (as torpedo boat) with 2—20 mm. forward  
 Complement: 15

**Notes.**—Short motor torpedo boat of wooden construction. Built by Vosper, Ltd., Portsmouth, to an experimental design. Launched 1 Sep., 1947. Completed 27 August, 1948. FPB 1602 (ex-MTB 539) was lost (silencer exploded and flooded engine room Sep., 1951 after which she was stripped of machinery and sent in tow of tug to Beaumaris 30 Jan., 1952; tow parted during gale and she disappeared).



FPB 1032.

1951, J. W. Kennedy

**FPB 1002** (ex-MTB 392)  
**FPB 1024** (ex-MTB 524)

**FPB 1025** (ex-MTB 525)  
**FPB 1026** (ex-MTB 526)

**FPB 1027** (ex-MTB 527)  
**FPB 1029** (ex-MTB 529)

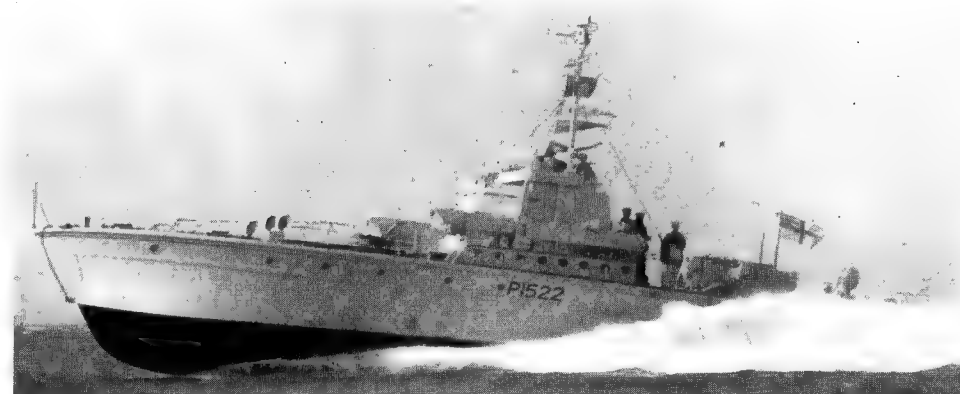
**FPB 1032** (ex-MTB 532)  
**FPB 1033** (ex-MTB 533)

Displacement: 49 tons  
 Dimensions: 73 × 19½ × 5½ (max.) feet  
 Guns: As M.G.B.: 2—20 mm. AA. (forward), 4 M.G. (Some have 1—6 pdr.)  
 Tubes: As M.T.B.: 2—18 inch torpedo tubes, with 2—20 mm. AA. guns aft  
 Machinery: 3 Packard engines. B.H.P. = 3,960 = 36½ kts. Sea speed: 30 kts.  
 Complement: 13

**Notes.**—Short motor torpedo boats built in 1944-45 by Vosper, Ltd., Portsmouth. FPB 1032, has a 4.5 inch gun forward (see photo

### Fast Patrol Boats—continued.

#### 9 "Power" Boats.



PROUD LEGIONARY.

1953, Wright & Logan.

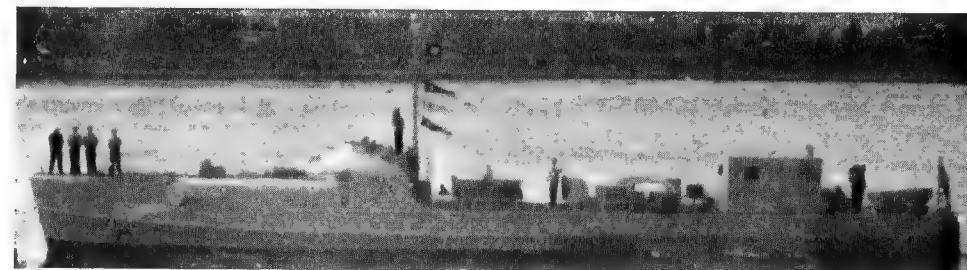
**PROUD FUSILIER** P 1505 (ex-MTB 505)  
**PROUD GRENADIER** P 1506 (ex-MTB 506)  
**PROUD GUARDSMAN** P 1507 (ex-MTB 507)  
**PROUD HIGHLANDER** P 1508 (ex-MTB 508)

**PROUD KNIGHT** P 1509 (ex-MTB 509)  
**PROUD LANCER** P 1519 (ex-MTB 519)  
**PROUD LEGIONARY** P 1522 (ex-MTB 522)  
**PROUD PATRIOT** P 1596 (ex-MTB 596)  
**PROUD PATROLLER** P 1598 (ex-MTB 598)

Displacement: 44 tons (52 tons full load)  
 Dimensions: 71½ × 20½ × 5½ (max.) feet  
 Guns: 1—6 pdr. (forward), 2—20 mm. AA., 4 M.G. in some  
 Tubes: 2—18 inch  
 Machinery: 3 Packard engines. B.H.P.: 4,050 = 39 kts. Sea speed: 32 kts.  
 Complement: 17

**Notes.**—British Power-Boat Type. No guns in *Proud Legionary*. 1,000 added to original numbers

#### 2 "S" Boats.



FPB 5212.

1954, courtesy Godfrey H. Walker, Esq.

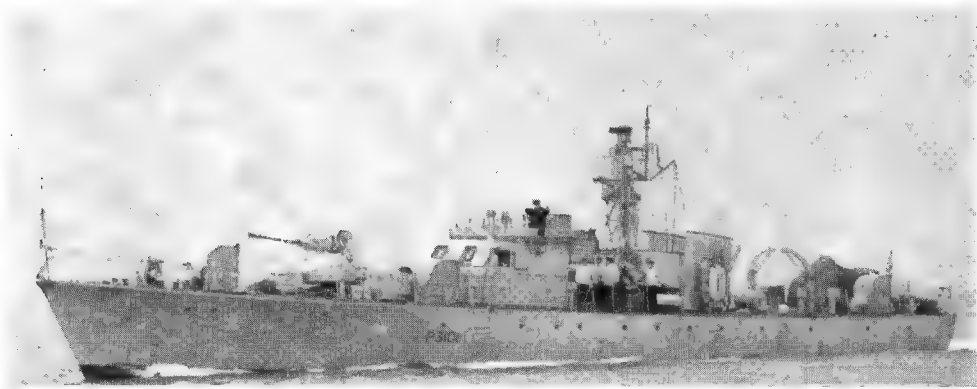
**FPB 5208** (ex-MTB 5208, ex-S 208)

**FPB 5212** (ex-MTB 5212, ex-S 212)

Displacement: 100 tons  
 Machinery: 3 Mercedes-Benz 20-cyl. V-banked engines (of type 518 in S 208 and 1 of type 511 in S 212 with 2,500 B.H.P. Napier Deltic 18-cyl. marine diesel engines H.P.: 9,000 = 38 kts., and 7,500 = 36 kts., respectively)

**Notes.**—Ex-German Motor Torpedo Boats. Built by Levsen, Vegesack. Retained for experimental purposes. Two 14.7 inch torpedo tubes removed. No armament.

Seaward Defence Boats—continued.  
18 "Ford" Class.



SHALFORD (Squid aft)		1954, Wright & Logan.			
ABERFORD	BRAYFORD	DESFORD	GIFFORD	HINKSFORD	MARLINGFORD
AXFORD	BRYANSFORD	DROXFORD	GLASSFORD	ICKFORD	MAYFORD
BECKFORD	CAMBERFORD	DUBFORD	GREATFORD	KINGSFORD	SHALFORD
Displacement :		110 tons			
Dimensions :		110 (pp.), 117½ (o.a.) × 20 feet			
Guns :		1 small			
A/S Weapons :		Squid			
Machinery :		Davey Paxman Diesels. Forlen engine on centre shaft			
Complement :		19			

Notes.—An entirely new design of naval vessel, their purpose being to detect, locate and destroy submarines, including midget submarines, in the approaches to defended posts. Their armament includes depth charge release gear and flares. Modern electronic equipment is used in association with their armament. The boats have comprehensive electrical installations. 3101 Series.

18 HDML Type.



SDML 1323		SDML 3503		SDML 3511		SDML 3514	
SDML 1326		SDML 3505		SDML 3512		SDML 3515	
SDML 1329		SDML 3506		SDML 3513		SDML 3516	
Displacement :		46 tons (54 tons full load)					
Dimensions :		72 (o.a.) × 15½ × 5½ feet					
Guns :		1—3 pdr. or 1—40 mm. AA., 1—20 mm. AA.					
Machinery :		2 Gardner Diesels. 2 shafts. B.H.P. : 260 to 320 = 11 to 12 kts.					
Complement :		14					

Notes.—Seaward Defence Motor Launches. Survivors of a series of about 480 Harbour Defence Motor Launches originally numbered HDML 1001 and upwards. SDML 3509 is lent to Malayan Naval Force. SDML 3501 and 3502 are temporarily lent to Malayan Marine Police. SDML 3505 was handed over to the Malayan Navy 19 Dec. 1953, and negotiations are in hand for transfer of SDML 3507.

Seaward Defence Boats—continued.  
Anti-Submarine Type.



SDB 3053.

1953, Skyfotos.



SDB 3002.

1954, Ian S. Pearsall, Esq.

SDB 3001 (ex-MTB 731)	SDB 3002 (ex-MTB 750)	SDB 3050 (ex-MTB 5010)	SDB 3053 (ex-MTB 5013)
Displacement:		102 tons (120 tons full load)	
Dimensions:		115 × 21½ × 5 feet	
A/S Weapons:		32 D.Cs. (3050 and 3053: Hedgehog)	
Machinery:		4 Packard engines. B.H.P.: 5,000 = 29 kts.	
Complement:		30	

Notes.—Motor Anti-Submarine Boats. Fairmile "D" Type. First two on A/S training, last two on Special Service for Prototype A/S trials. SDB 3053 has D.C.T. and 40 mm. Bofors aft, also tripod mainmast, two rocket projectors and antennae forward

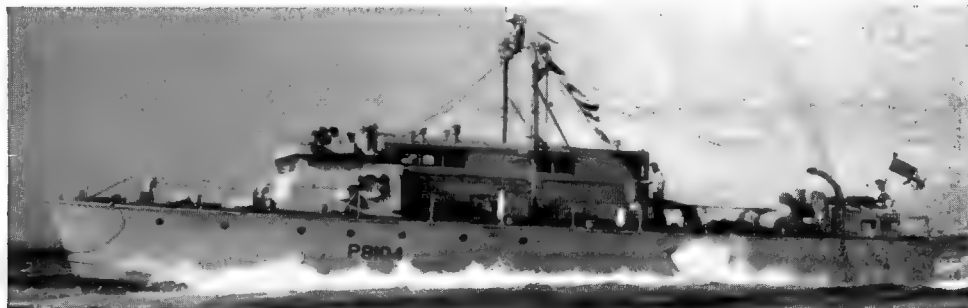
GREY GOOSE (ex-SGB 9) S 309

Builders :	J. Samuel White & Co., Ltd., Cowes
Laid down :	23 Jan. 1941
Launched :	14 Feb. 1942
Completed :	4 July, 1942
Displacement :	205 tons standard (260 tons full load)
Dimensions :	137½ (pp.), 145½ (o.a.) × 20 × 5½ feet
Machinery :	2 Rolls-Royce R.M. 60 gas turbine propulsion units. H.P. : 12,000
Oil fuel :	50 tons

Notes.—This type, with hull of steel was an experimental Coastal Forces design of Steam Gunboat of which Grey Goose is the sole survivor. Originally engined by Metropolitan-Vickers single reduction geared steam turbines, S.H.P. : 8,000 = 35 kts. and armed with 1—3 inch, 1—2 pdr. AA., 1—20 mm., 4 to 8 M.G., 2—21 inch torpedo tubes. Taken in hand for conversion 1952. Completed 1954 with twin funnels athwartships.

## GREAT BRITAIN—Control Boats, Motor Launches

### 6 Controlled Target Boats.



CT 8104.

1954, Wright & Logan.

**CT 8101** (ex-CT 101)      **CT 8102** (ex-CT 102)      **CT 8103** (ex-CT 103)      **CT 8104** (ex-CT 104)

Displacement : 44 tons  
Dimensions : 77 × 19½ × 5½ (mean) feet  
Machinery : 3 Packard engines. B.H.P. : 3,750  
Complement : 11

Note.—Controlled Target Boats. Built by J. Samuel White & Co. Ltd., Cowes, Isle of Wight.

**CT 8044** (ex-CT 44)      **CT 8045** (ex-CT 45)  
Displacement : 32 tons  
Dimensions : 73 × 19½ × 5½ (max.) feet  
Machinery : Packard

Notes.—Fast Target Towing Craft. Built by Vospers, Ltd., Portsmouth.

### Radio Control Boats.



RCB (EL) 8202.

1954, Wright & Logan.

**RCB (EL) 8202** (ex-RCB (EL) 2, ex-CT 46)      **RCB (EL) 8201** (ex-RCB (EL) 1, ex-MTB 457)      **RCB (EL) 8204** (ex-FPB 1580, ex-MTB 480)  
**RCB (EL) 8203** (ex-MTB 1521)      **RCB (EL) 8205** (ex-FPB 1588, ex-MTB 488)

Displacement : 44 tons  
Dimensions : 71½ × 20½ × 5 feet  
Machinery : Packard

Notes.—Radio Control Boats. Built by British Power Boat Co.

### Motor Launches.

**ML 6009**      **ML 6010**      **ML 6011**      **ML 6012**      **ML 6013**      **ML 6014**

Displacement : 75 tons  
Dimensions : 91 (o.a.) × 16½ × 5½ (max.) feet  
Guns : 3—20 mm.  
Machinery : MWM engines

Notes.—Ex-German Air/Sea Rescue launches. Constitute the Rhine Flotilla.

### Recue Motor Launches



RML 498.

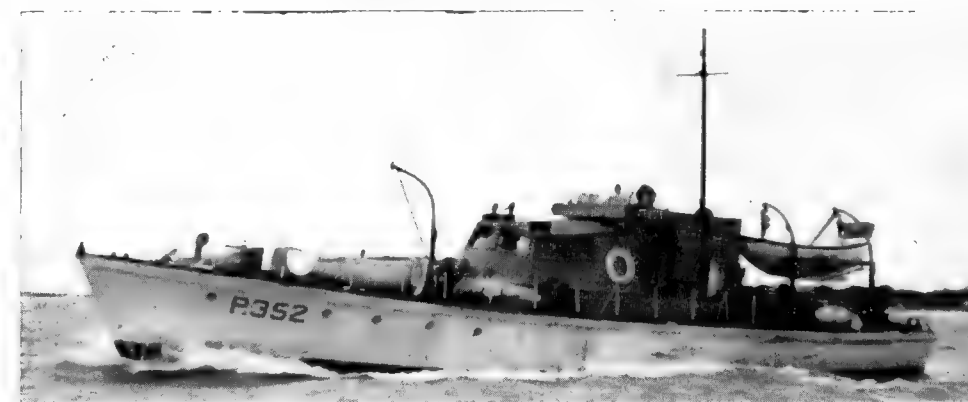
Added 1952, courtesy Gordon A. Storey, Esq.

**RML 495**      **RML 496**      **RML 498**      **RML 512**      **RML 515**      **RML 529**

Displacement : 85.6 tons (130 tons full load)  
Dimensions : 112 × 18½ × 5 feet  
Speed : 17.7 kts.  
Complement : 16

Notes.—Rescue Motor Launches of Fairmile "B" Type. Survivors of a series of nearly 400 MLs.

### Survey Motor Launches.



MEDA.

1951, J. W. Kennedy.

**MEDA** (ex-SML 352, ex-ML 1301)      **SML 322** (ex-ML 1053)      **SML 324** (ex-ML 1085)      **SML 326** (ex-ML 1393)  
**SML 323** (ex-ML 1081)      **SML 325** (ex-ML 1091)      **SML 327** (ex-ML 1411)

Notes.—Survey Motor Launches. HDML type. Meda on South Coast Survey. Square cabin deckhouse aft. White hull, buff upperworks



## AS and MS Trawlers.

(Anti-Submarine, Minesweeping, Wreck Dispersal, Danlaying,).

32 "Isles" Class.



FETLAR.

1953 J. W. Kennedy.

3 Ardrossan Dockyard Co

**COLL** (Apr. 7, 1942)  
**GORREGAN** (Dec. 30, 1943)  
**GRAEMSAY** (Aug. 3, 1942)

1 George Brown & Co.

**DAMSAY** (June 27, 1942)

1 Canadian Yard

**GATESHEAD** (Aug. 5, 1942)

4 Cochrane & Sons

**FETLAR** (July 10, 1941)  
**IMERSAY** (Aug. 21, 1944)  
**ORSAY** (Jan. 1, 1945)  
**RONAY** (Feb. 15, 1945)

14 Cook, Welton & Gemme

**ANNET** (March 25, 1943)  
**BRYHER** (April 8, 1943)  
**FLATHOLM** (May 8, 1943)  
**LINDISFARNE** (June 17, 1943)  
**LUNDY** (Aug. 29, 1942)  
**SANDRAY** (Oct. 5, 1944)  
**SHILLAY** (Nov. 18, 1944)  
**SURSAY** (Dec. 16, 1944)  
**TAHAY** (Dec. 31, 1944)  
**TOCOGAY** (Feb. 7, 1945)  
**TRODDAY** (March 3, 1945)  
**VACEASAY** (March 17, 1945)  
**VALLAY** (April 10, 1945)  
**WIAY** (April 26, 1945)

1 Fleming & Ferguson

**BARDSEY** (July 7, 1943)

1 Goole S.B. & R. Co

**TIREE** (Sept. 6, 1941)

1 A. & J. Inglis

**SWITHA** (Apr. 3, 1942)

5 John Lewis & Sons

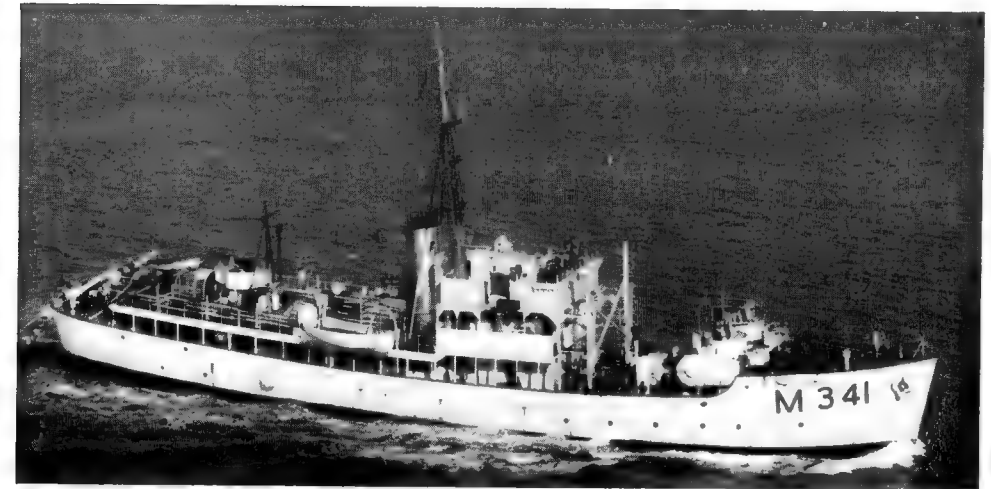
**CALDY** (Aug. 31, 1943)  
**FOULNESS** (March 23, 1943)  
**SKOMER** (June 17, 1943)  
**STEEPHOLM** (July 15, 1943)  
**TRONDRA** (Oct. 4, 1941)

1 Henry Robb

**SKYE** (March 17, 1952)

Displacement: 545 to 560 tons (770 tons full load)  
Dimensions: 150 (p.p.), 164 (o.a.) x 27½ x 14 feet  
Guns: 1—12 pdr. AA., 3—20 mm. (Removed from those used for wreck dispersal and tank cleaning)  
Machinery: Triple expansion I.H.P.: 850 = 12 kts.  
Boiler: 1 cylindrical  
Coal: 183 tons

Notes.—Launch dates above. *Gateshead* was depot ship for XE craft (midget submarines), *Annet*, *Flatholm* and *Steepholm* serve as DVs *Gorregan* is leader of 301st Auxiliary Minesweeping Squadron. *Bern*, *Fetlar*, *Graemsay*, *Tiree* and *Lindisfarne* are A/S Trawlers; *Damsay*, Wreck Dispersal Carrier. Others serve in 1st M/S Experimental Flotilla; as Mine Location Vessels; as tenders to TAS School, HMS *Vernon*; in local squadrons, and as Danlayers, etc. Four transferred to R.N.Z.N., and six to Portuguese Navy; others lent to Italy. *Bardsey*, *Caldy*, *Coll* and *Switha* have been converted to oil-fuel-tank-cleaning vessels. War losses: *Brora*, *Campobello*, *Canna*, *Gairsay*, *Ganilly*, *Orfasy*, *Rysa*, *Stronsay*, *Wallasea*. Scrapped: *Bryher*, *Oronsay*.



WIAY.

1954, Skyfotos.



ROSALIND.

1953, Skyfotos.

## 1 "Shakespearian" Class.

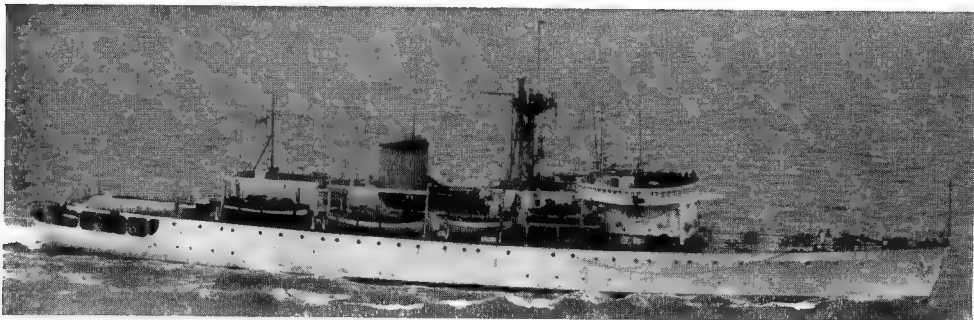
ROSALIND

Builders: A. & J. Inglis  
Launched: 3 May, 1941  
Displacement: 545 tons standard (770 tons full load)  
Dimensions: 150 (p.p.), 164 (o.a.) x 27½ x 11 feet  
Guns: 1—4 inch AA., 2—20 mm. AA.  
Machinery: Triple expansion I.H.P.: 950 = 12 kts.  
Boiler: 1 cylindrical

Notes.—Minesweeper. At Mombasa. Transferred to Kenya R.N.V.R. The East African Naval Force was inaugurated by the Governor of Tanganyika and the acting Governor of Kenya at Mombasa in July 1950.

GREAT BRITAIN—Survey Ships

Survey Ships.



VIDAL.

1954, Wright & Logan.



VIDAL.

1954, Skyfoto.

VIDA

Builders :	H.M. Dockyard, Chatham
Engineers :	H.M. Dockyard, Chatham
Laid down :	5 July 1950
Launched :	31 July 1951
Completed :	29 Mar. 1954
Displacement :	1,565 tons standard (1,885 tons full load)
Dimensions :	297 (pp.), 315 (o.a.) × 40 × 10½ feet
Armament :	4—3 pdr. saluting guns and depth charges
Aircraft :	1 helicopter
Machinery :	4 Diesel engines driving two shafts through reverse and reduction gear boxes
Complement :	160

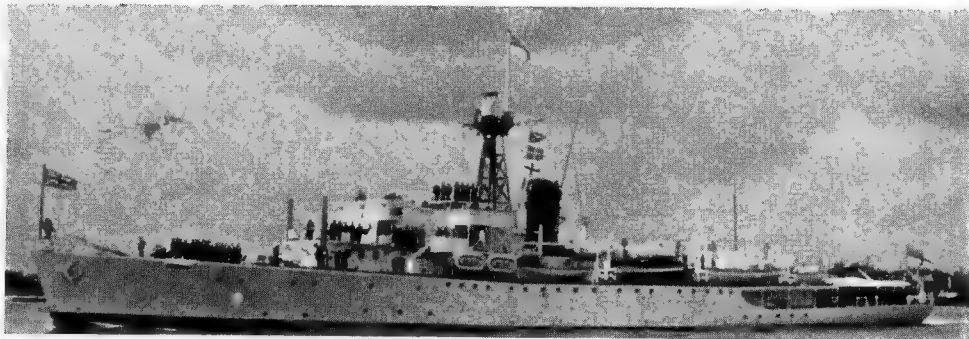
General Notes.—Designed by Admiralty from the start for hydrographic surveying and chart production. Main propelling machinery designed in Royal Dockyard, Chatham. First surveying ship to be equipped with helicopter flight deck and hangar, designed to enable a helicopter to land on and fly off for air surveying photography and transport of personnel to shore observation stations. The latest electronic aids to surveying and navigation are incorporated. Electrical power is provided from 360 kw. 220 volt direct current diesel generating sets. Air conditioning plant is installed to meet equatorial and polar climatic conditions. Ship carries three surveying motor launches equipped with echo sounding apparatus. First British naval vessel to be built equipped from the beginning for cafeteria messing. Cost £1,345,000.

Helicopter Notes.—The after end of the forecastle deck extension is a landing apron for the helicopter, which is housed in the after deck house hangar on the same level.

Appearance Notes.—The funnel and the fore part of the bridge are pear-shaped in plan.

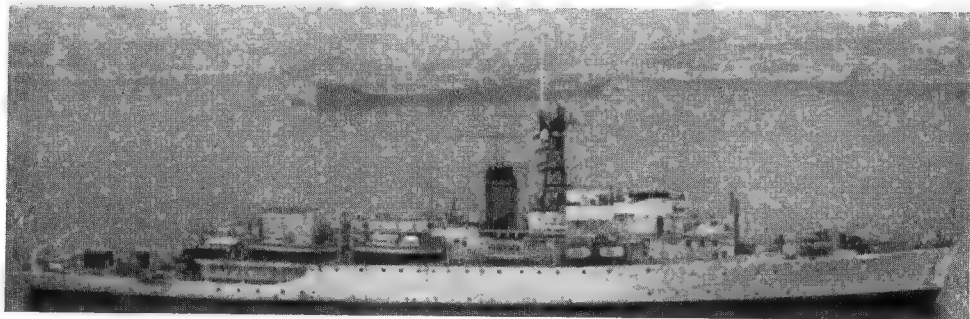
Survey Ships—continued.

4 "Cook" Class (Frigate Type).



COOK.

1954, J. W. Kennedy.



DALRYMPLE.

1954, A. & J. Pavia.

COOK (ex-Pegwell Bay, ex-Loch Machrum)  
DALRYMPLE (ex-Luce Bay, ex-Loch Glass)

DAMPIER (ex-Herne Bay, ex-Loch Eil)  
OWEN (ex-Thurso Bay, ex-Loch Muick)

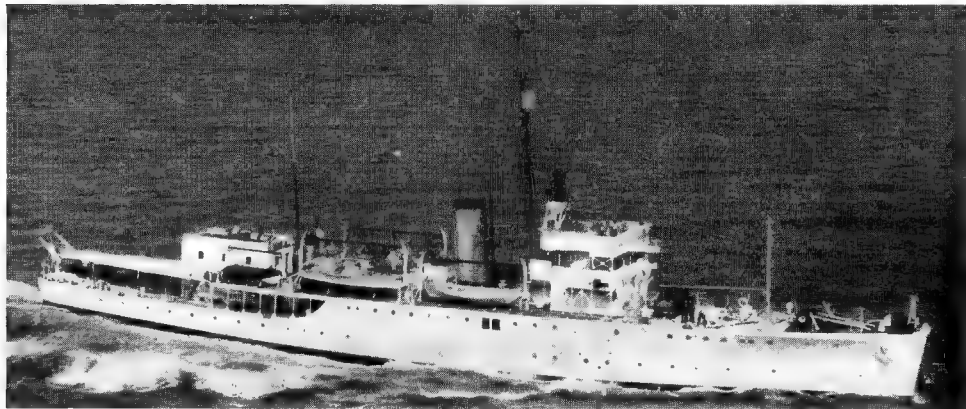
Displacement:	1,640 tons (2,280 tons full load)
Dimensions:	286 (pp.), 307 (o.a.) × 38½ × 12½ feet (14½ feet max.)
Armament:	4—3 pdrs., 2 D.C.T.
Machinery:	2 4-cylinder triple expansion. 2 shafts. I.H.P.: 5,500 = 19.5 kts.
Boilers:	2 Admiralty 3-drum type
Oil fuel:	580 tons
Complement:	160 (Cook 158)

Notes.—All ex-frigates. Cook, Dalrymple, both completed at Devonport; Dampier, Owen, both completed at Chatham. Equipped with Radar, Asdic and other modern equipment. Electrical power in these ships at 220 volts DC is derived from two 120 kw. steam-turbine-driven and two 150 kw. diesel-driven generators. Main machinery of Cook and Dalrymple manufactured by George Clark, Ltd., Sunderland.

Name	Builders	Laid down	Launched	Completed
Cook	Wm. Pickersgill & Sons, Ltd., Sunderland	30 Nov. 1944	24 Sep. 1945	20 July 1950
Dalrymple	Wm. Pickersgill & Sons, Ltd., Sunderland	29 Apr. 1944	12 Apr. 1945	10 Feb. 1949
Dampier	Smith's Dock Co., Ltd., South Bank-on-Tees	7 Aug. 1944	15 May 1945	6 June 1948
Owen	Hall, Russell & Co., Ltd., Aberdeen	30 Sep. 1944	19 Oct. 1945	23 Sep. 1949

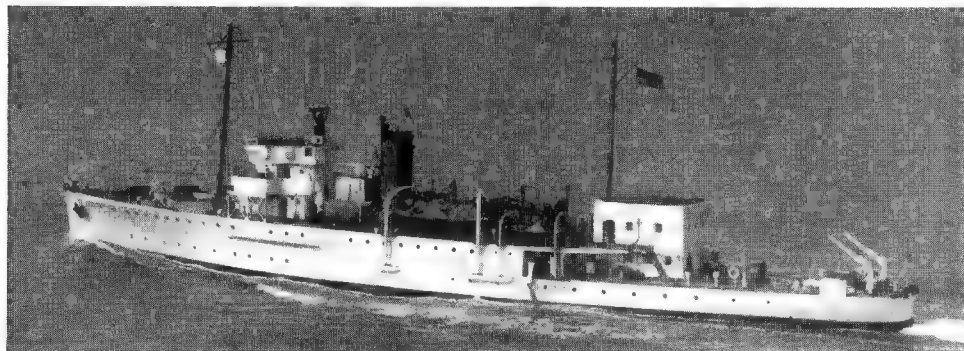
Survey Ships—continued.

4 “Franklin” Class (Ocean Minesweeper Type).



SHACKLETON.

1954, Skyfotos.



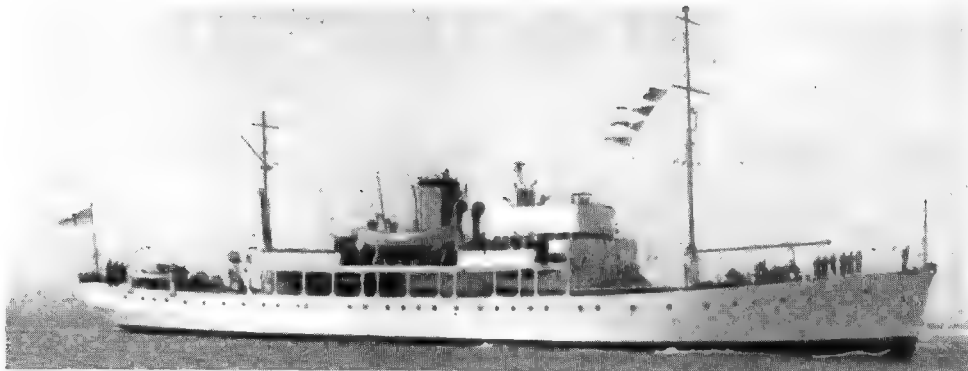
SCOTT.

1953, Skyfotos.

FRANKLIN	SCOTT	SEAGULL	SHACKLETON (ex-Sharpshooter)
Displacement:	830 tons (1,260 tons full load)		
Dimensions:	230 (pp.), 245 (o.a.) × 33½ × 7 (mean) 10 (max.) feet		
Machinery:	Parsons geared turbines. 2 shafts. S.H.P.: 1,750 = 17 kts		
Boilers:	2 Admiralty 3-drum type		
Oil fuel:	220 tons		
Complement:	80		

Notes.—All begun as fleet minesweepers under 1935, 1936 and 1937 Estimates. First two differ from latter pair, as apparent from photos. *Seagull*, laid down 15 Feb. 1937, is of all-welded construction. *Shackleton* was renamed in 1953.

Name	Builders	Launched	Completed
Franklin	Ailsa Shipbuilding Co. Ltd., Troon.	22 Dec. 1937	4 July 1938
Scott	Caledon Shipbuilding & Engineering Co. Ltd., Dundee.	23 Aug. 1938	31 July 1939
Seagull	H.M. Dockyard, Devonport.	28 Oct. 1937	30 May 1938
Shackleton	H.M. Dockyard, Devonport.	10 Dec. 1936	17 Dec. 1937



CHALLENGER

1953, J. W. Kennedy.

Builders :	H.M. Dockyard, Chatham
Launched :	1 June 1937
Displacement:	1,140 tons (1,705 tons full load)
Dimensions :	200 (pp.), 220 (o.a.) × 36 × 12½ (mean) feet
Machinery :	Triple expansion. I.H.P. : 1,200 = 12.5 kts.
Oil fuel :	340 tons
Radius :	9,000 miles
Complement :	84

Note.—Due to be scrapped in 1954.

Minelayer.



1953, J. W. Kennedy.

PLOVER

Builders:	Wm. Denny & Bros. Ltd., Dumbarton
Laid down:	7 Oct. 1936
Launched:	8 June 1937
Completed:	Sept. 1937
Displacement:	805 tons (1,020 tons full load)
Dimensions:	180 (pp.), 195½ (o.a.) × 37½ × 8½ feet
Guns:	2 M.G.
Machinery:	Triple expansion. I.H.P.: 1,400 = 14.75 kts.
Complement:	69

Notes.—Built as a coastal minelayer. Employed as minelaying tender to Torpedo and Anti-Submarine School, H.M.S. *Vernon*.

GREAT BRITAIN—Controlled Minelayers

Controlled Minelayers.

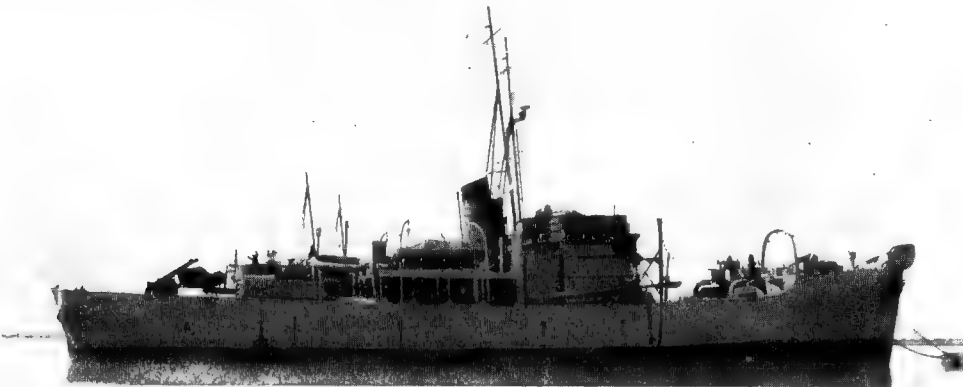


1953, A. & J. Pavia.

REDSHANK (ex-Turbot)

Builders: Cochrane & Sons, Ltd., Selby  
Laid down: 18 May 1942  
Launched: 28 Aug. 1942  
Completed: 10 Jan. 1943  
Displacement: 680 tons standard (900 tons full load)  
Dimensions: 162 × 25½ × 12½ feet  
Guns: 1 small  
Machinery: Triple expansion. 1 shaft. I.H.P.: 700 = 11.25 kts.  
Boilers: 1 cylindrical  
Oil fuel: 200 tons

Notes.—Built as a minelaying trawler and specially equipped for controlled minelaying. Engined by Amos & Smith.



STONECHAT.

1951, P. A. Vicary.

PENYU (ex-Dabchick, ex-Thorney)

Displacement: 560 tons (790 tons full load)  
Dimensions: 150 (pp.), 164 (o.a.) × 27½ × 12½ feet  
Guns: 1—20 mm. AA., etc.  
Machinery: Triple expansion. I.H.P.: 850 = 12.5 kts.  
Boiler: 1 cylindrical

STONECHAT

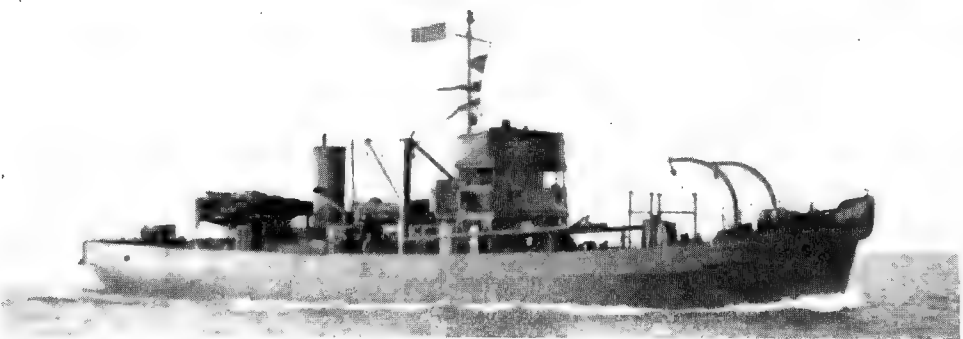
Notes.—Trawler type vessels. Specially equipped for controlled minelaying. Another of this type in Royal Canadian Navy. War loss: Cornrake (Cochrane). Blackbird acquired by Guent Company and converted into a fishing trawler 1949. Dabchick lent to Malayan Naval Force and renamed Penyu 1954.

Name	Builders	Laid down	Launched	Completed
Dabchick	Cook, Welton & Gemmell, Ltd., Beverley	20 Nov. 1942	9 Mar. 1943	8 July 1943
Stonechat		23 Feb. 1944	22 Aug. 1944	12 Nov. 1944



GOSSAMER.

1953, Skyfotos.



MINER V.

1951, J. W. Kennedy.

GOSSAMER (ex-Miner II)  
MINER I MINER III

MINER IV

MINER V

MINER VI

MINER VII

MINER VIII

Displacement: 346 tons (355 tons full load)  
Dimensions: 110½ × 26½ × — feet  
Machinery: Ruston & Hornby Diesels. 2 shafts. B.H.P.: 360 = 10 kts.

Notes.—Built by Philip & Son, Ltd. Launched 1939–44. Gossamer is mine location vessel. Miner V (anti-submarine ship) and Miner VII are tenders to H.M.S. Defiance, Torpedo, Anti-Submarine and Electrical School, Devonport. Miner III and Miner IV have black hulls red waterline and light grey upperworks with respective numbers painted on the funnels.

Coastal (Controlled) Minelayer.

LINNET

Builders: Ardrossan Dockyard Co., Ltd.  
Launched: 3 May 1938

Displacement: 560 tons (610 tons full load)  
Dimensions: 145 (pp.), 163½ (o.a.) × 27½ × 8 feet  
Guns: 1—20 mm. AA., 2 M.G.  
Machinery: Triple expansion, by Ferguson Bros., Ltd. I.H.P.: 400 = 10.5 kts.  
Complement: 24

Notes.—Built as a coastal minelayer under 1936 Estimates. Employed as Static Pulsing Vessel. Sister ship Redstart was a war loss.



## Destroyer Depot Ships and Heavy Repair Ships—GREAT BRITAIN

### Destroyer Depot Ships.



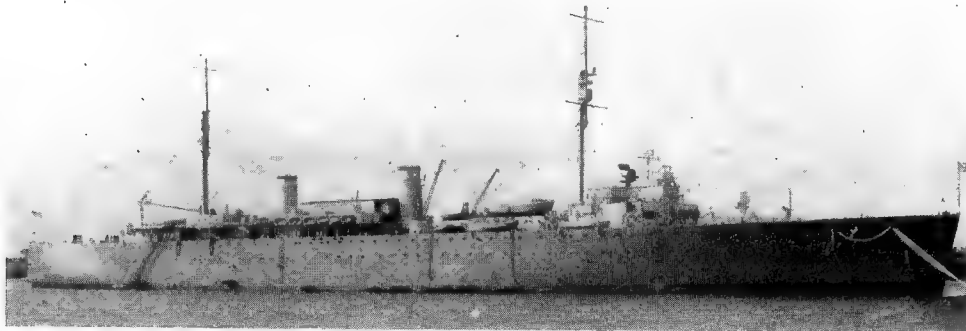
1949, Abrahams.

**TYNNE**

*Builders :* Scotts' S.B. & Eng. Co., Ltd., Greenock  
*Laid down :* 15 July 1938  
*Launched :* 28 Feb. 1940.  
*Completed :* 28 Feb. 1941

*Displacement :* 11,000 tons (14,100 tons full load)  
*Dimensions :* 621 (o.a.) × 66 × 20 feet  
*Guns :* 8—4.5 inch, 8—2 pdr., 13—20 mm.  
*Machinery :* Parsons geared turbines. 2 shafts. S.H.P. : 7,500 = 17 kts.  
*Boilers :* 4, of 3-drum type

*Notes.*—Destroyer Depot Ship. Built under 1937 Estimates. Equipment includes two furnaces, each capable of melting 500 lb. of metal at any temperature up to 1,500 degrees centigrade; a foundry and machine shops with milling and grinding machines. Flagship of Home Fleet autumn 1954.



1951, C. Parsons, Esq.

**WOOLWICH**

*Builders :* Fairfield Shipbuilding & Eng. Co., Ltd., Govan  
*Laid down :* 24 May 1933  
*Launched :* 20 Sept. 1934  
*Completed :* June 1935

*Displacement :* 8,750 tons (9,500 tons full load)  
*Dimensions :* 575 × 64 × 14½ (mean) 16½ (max.) feet  
*Guns :* 4—4 inch AA., 2—2 pdr.  
*Machinery :* 2 sets single reduction geared turbines. 2 shafts. S.H.P. : 6,500 = 15 kts.  
*Boilers :* 4 Admiralty 3-drum type  
*Oil fuel :* 1,170 tons  
*Complement :* 406

*Notes.*—Depot ship for destroyers. Authorised under 1932 Estimates. Carries a full equipment of machine tools of the latest type. Fitted with two 3-ton cranes, one 20-ton derrick, and one 6-ton derrick.

### Heavy Repair Ships.



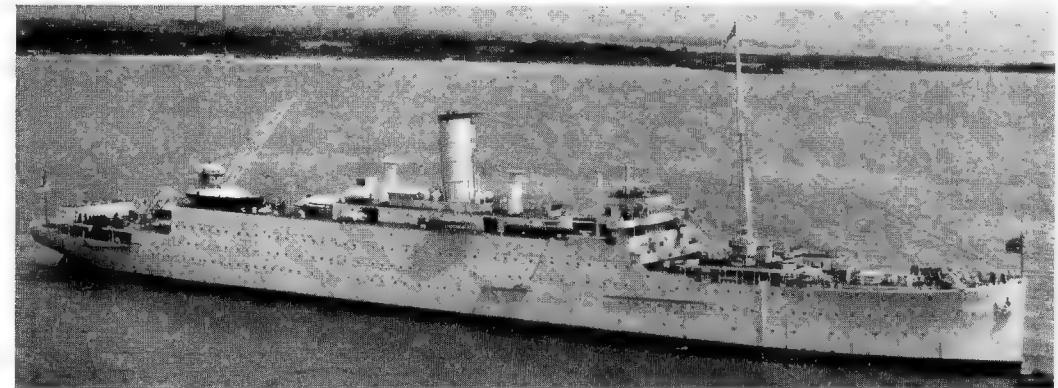
1954, A. & J. Pavia.

**RANPURA**

*Builders :* R. & W. Hawthorn, Leslie & Co., Ltd., Hebburn  
*Launched :* 1925

*Displacement :* 16,120 tons (18,250 tons full load)  
*Dimensions :* 548½ (pp.), 570 (o.a.) × 71½ × 28½ feet  
*Machinery :* Quadruple expansion steam reciprocating engines. 2 shafts. I.H.P. : 15,000 = 17 kts.  
*Boilers :* 6 D.E.  
*Oil fuel :* 2,370 tons

*Notes.*—Former P & O. liner converted into a Heavy Repair Ship in 1945. Sister ship of armed merchant cruiser *Rawalpindi* requisitioned for naval service and sunk in gallant action against German battleship *Scharnhorst* 1939.



ALAUNIA.

1954, Skyfotos.

**ALAUNIA**

**AUSONIA**

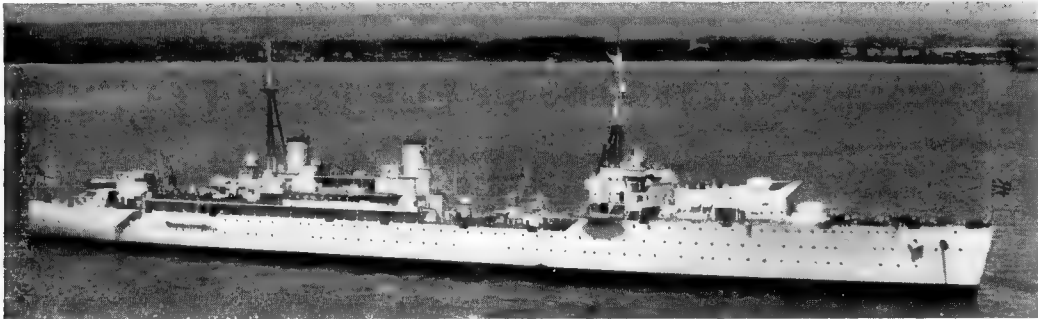
*Displacement :* 19,000 to 20,760 tons full load  
*Dimensions :* 519½ (pp.), 538 (o.a.) × 65½ × 31½, *Alaunia* 32½ (max.) feet  
*Guns :* Numerous 20 mm. AA.  
*Machinery :* Geared turbines. 2 shafts. S.H.P. : 8,500 = 15 kts.  
*Oil fuel :* *Alaunia* 2,245 tons, *Ausonia* 2,287 tons

*Notes.*—Former Cunard liners converted into Heavy Repair Ships. *Alaunia* is training ship for engine-room ratings at Devonport.

Name	Builders	Launched
<i>Alaunia</i>	John Brown & Co., Ltd., Clydebank	1925
<i>Ausonia</i>	Armstrong Whitworth	1921

GREAT BRITAIN—Submarine Depot Ships

Submarine Depot Ships.

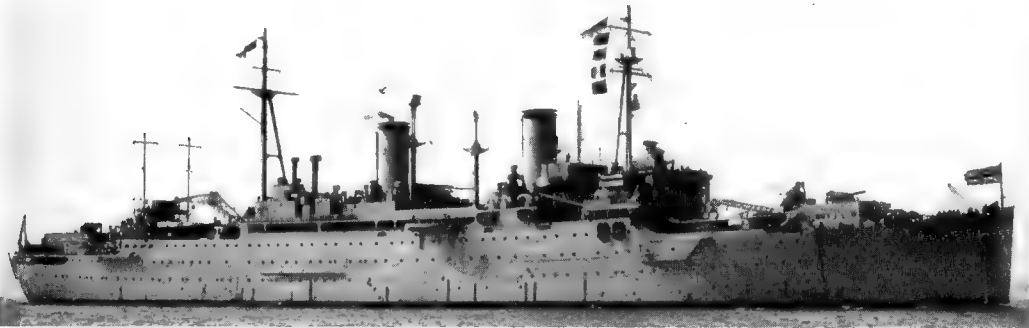


ADAMANT

1954, Skyfotos.

Builders : Harland & Wolff, Ltd., Belfast  
Laid down : 18 May 1939  
Launched : 30 Nov. 1940  
Completed: 28 Feb. 1942  
Displacement : 12,700 tons (16,500 tons full load)  
Dimensions : 646 (pp.), 658 (o.a.) × 70½ × 20 feet  
Guns : 8—4.5 inch, 16—2 pdr., 4—40 mm., 10—20 mm., 4—3 pdr.  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 8,000 = 17 kts.

Notes.—Submarine Depot Ship. Ordered under 1938 Estimates.



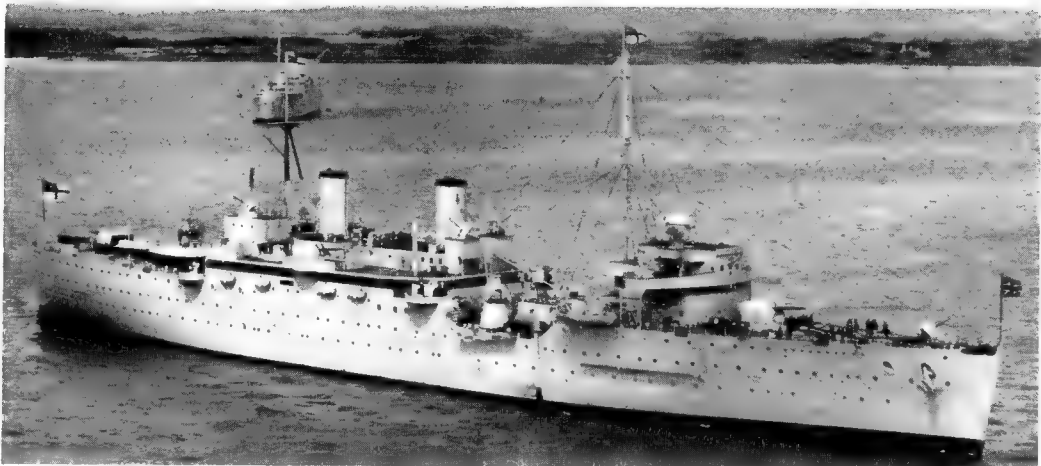
MONTCLARE

1954, Wright & Logan.

Builders : John Brown & Co., Ltd., Clydebank  
Launched: 1922  
Displacement: 19,600 tons standard (21,100 tons full load)  
Dimensions: 550 (pp.), 575 (o.a.) × 70 × 28 feet  
Guns: 4—4 inch D.P., 19—20 mm.  
Machinery: Geared turbines. 2 shafts. S.H.P.: 12,500 = 17 kts.  
Oil fuel: 2,250 tons  
Complement: 480, including repair staff

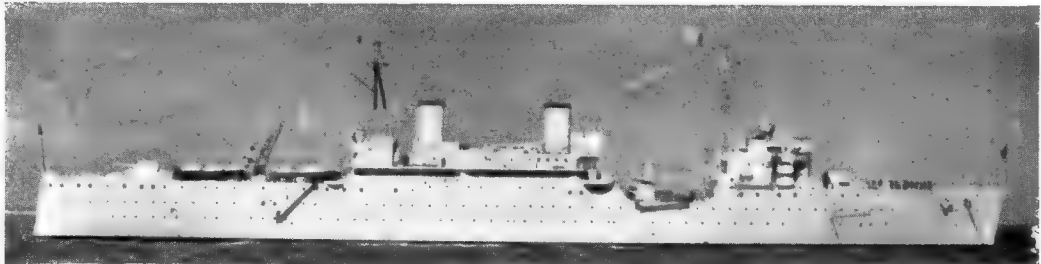
Notes.—Former Canadian Pacific liner converted into a Destroyer Depot Ship in 1944, but re-converted to a Submarine Depot Ship after the war. Re-engined a few years before the war in 1939. Sister ship *Wolfe* (ex-Montcalm) was discarded in 1949.

Submarine Depot Ships—continued.



MAIDSTONE.

1954, Skyfotos.



FORTH.

1954, courtesy Godfrey H. Walker, Esq.

FORTH

MAIDSTONE

Displacement : 9,060 tons (*Forth*), 8,900 tons (*Maidstone*), 11,965 and 11,815 tons full load, respectively  
Dimensions : 497 (pp.), 531 (w.l.), 574 (o.a.) × 73 × 20 (mean) feet  
Guns : *Forth* : 8—4.5 inch, 2 multiple pompoms, 4—3 pdr., 4 smaller  
*Maidstone* : 8—4.5 inch, 8—2 pdr. pompoms, 5—40 mm. AA., 4—20 mm. AA.  
Machinery : Brown-Curtis geared turbines. 2 shafts. S.H.P. : 7,000 = 17 kts.  
Complement : 502 (including 64 repair staff and 43 as spare submarine crew).

General Notes.—Depot Ships for Submarines. *Maidstone* ordered Aug. 17, 1936, under 1935 Estimates. *Forth* laid down under 1937 Estimates. Guns are in pairs, two forward, two aft and two sponsoned on either beam. Equipment includes a foundry; coppersmiths', plumbers' and carpenters' shops; heavy and light machine shops; electrical and torpedo repair shops; and plant for charging submarine batteries.

Appearance Notes.—*Maidstone* has light AA gun in bows. She now mounts a 4-inch gun on a submarine pattern mounting, for training purposes only, on the starboard side just aft of the midships 4.5 inch turret.

Name	Builders	Laid down	Launched	Completed
<i>Forth</i> <i>Maidstone</i>	John Brown & Co., Ltd., Clydebank	30 June 1937	11 Aug. 1938	14 May 1939
		1936	21 Oct. 1937	5 May 1938

Maintenance Ships.

2 "Mull" Class.



MULL OF KINTYRE.

Added, 1948.

MULL OF GALLOWAY (ex-Kinnaird Head)

MULL OF KINTYRE

Displacement: 10,200 tons  
Dimensions: 416 (w.l.), 441 (o.a.)  $\times$  57  $\times$  30 feet  
Guns: 16—20 mm. AA.  
Machinery: Triple expansion. I.H.P.: 2,500 = 11 kts.

Notes.—Launched in Canada, 1944. Mull of Galloway is Inshore Minesweeper Flotilla Headquarters and Base Ship, Mull of Kintyre is Armament Maintenance Ship.

3 "Head" Class.



BERRY HEAD.

Added 1953, C. Parsons, Esq.

BERRY HEAD

DUNCANSBY HEAD

RAME HEAD

Displacement: 8,580 tons  
Dimensions: 439  $\times$  62  $\times$  29 feet  
Guns: 16 to 32—20 mm. AA.  
Machinery: Triple expansion. I.H.P.: 2,500 = 11 kts.  
Boilers: 2 Foster-Wheeler

Notes.—Built at Vancouver, B.C. All launched 1944-45. Escort Maintenance Ships. Beachy Head and Flamborough Head of this class now belong to the Royal Canadian Navy.

Landing Ship Maintenance Ships.

2 "Point" Class.

DODMAN POINT

HARTLAND POINT

Displacement: 8,580 tons  
Dimensions: 439  $\times$  62  $\times$  29 feet  
Machinery: Triple expansion. I.H.P.: 2,500 = 11 kts.

Landing Craft Maintenance Ships.

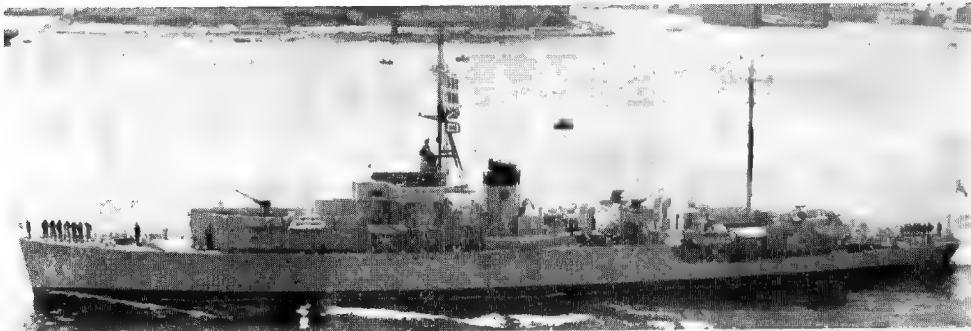
2 "Ness" Class.

BUCHAN NESS

GIRDLE NESS

Displacement: 8,580 tons  
Dimensions: 439  $\times$  62  $\times$  29 feet  
Machinery: Triple expansion. I.H.P.: 2,500 = 11 kts.

Headquarters Landing Ships.



MEON.

1954, A. & J. Pavia.

MEON

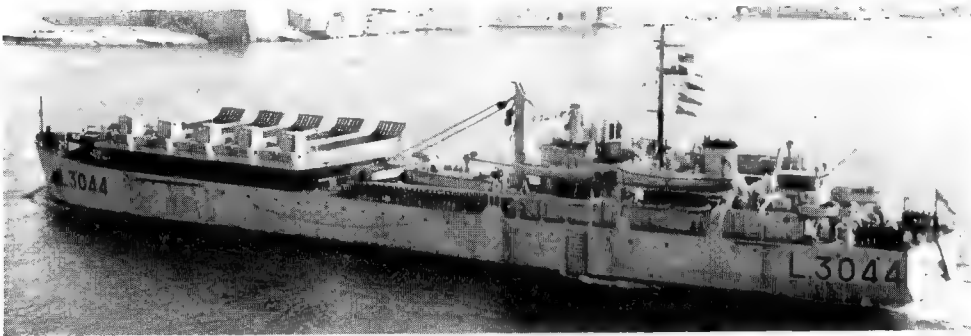
WAVENEY

Displacement: 1,460 tons standard (1,865 tons full load)  
Dimensions: 301½ (o.a.)  $\times$  36½  $\times$  12 feet  
Guns: 3—40 mm., 4—20 mm.  
Machinery: Triple expansion. 2 shafts. I.H.P.: 5,500 = 20 kts.  
Boilers: 2 Admiralty 3-drum type

Notes.—Originally "River" class frigates, see an earlier page. Meon and Waveney were converted from original frigate type to "Landing Ship Headquarters (Small)." Exe, which served as a frigate during the war, was earmarked for conversion to L.S.H.(S) in 1949.

Name	Builders	Laid down	Launched	Completed
Meon	A. & J. Inglis, Ltd., Glasgow	31 Dec. 1942	4 Aug. 1943	31 Dec. 1943
Waveney	Smith's Dock Co. Ltd., South Bank-on-Tees	8 Oct. 1941	30 April 1942	16 Sept. 1942

Tank Landing Ships.



NARVIK.

1952, A. & J. Pavia.

MESSINA (ex-LST (C) 3043)

NARVIK (ex-LST (C) 3044)

Displacement: 2,256 tons light (4,980 tons full load)  
Dimensions: 345½ (o.a.)  $\times$  54  $\times$  4½ (forward), 11½ (max.) (aft) feet (Beaching draughts)  
Guns: 10—20 mm. Oerlikon AA.  
Machinery: Triple expansion steam reciprocating. 2 shafts. I.H.P.: 5,500 = 13 kts.  
Oil fuel: 1,400 tons  
Complement: 105

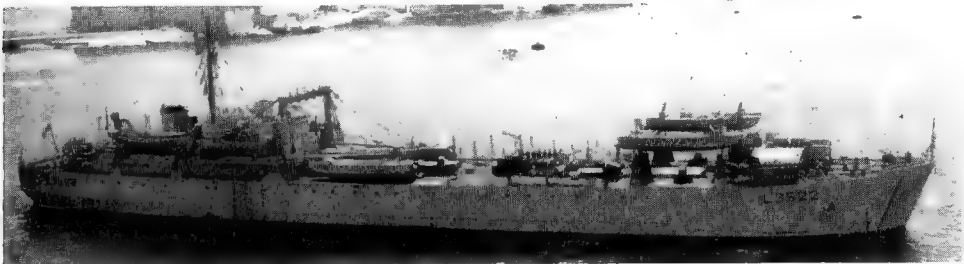
Notes.—Can carry 1 LCT, 5 LCA, 15 40-ton tanks, 15 lorries.

GREAT BRITAIN—Amphibious Vessels

Tank Landing Ships—continued.



REGGIO, 1952, J. W. Kennedy.  
**DIEPPE** (ex-LST (3) 3016)      **SALERNO** (ex-LST (3) 3513)      **WALCHEREN** (ex-LST (3) 3525)  
**LOFOTEN** (ex-LST (3) 3027)      **SUVLA** (ex-LST (3) 3518)      **ZEEBRUGGE** (ex-LST (3) 3532)  
**REGGIO** (ex-LST (3) 3511)  
Note.—Reggio was the first LST (A) i.e. Landing Ship Tank (Assault). Ships of LST (3) type have been allocated for conversion to LST (A).



TRACKER, 1951, A. & J. Pavia.  
**ATTACKER** (ex-LST (3) 3010)      **HUNTER** (ex-LST (3) 3042)      **TRACKER** (ex-LST (3) 3522)  
**BRUIZER** (ex-LST (3) 3025)      **STALKER** (ex-LST (3) 3515)      **TROUNCER** (ex-LST (3) 3523)  
**CHARGER** (ex-LST (3) 3026)      **STRIKER** (ex-LST (3) 3516)      **TRUMPETER** (ex-LST (3) 3524)  
**FIGHTER** (ex-LST (3) 3038)  
Note.—Striker is LST (A). Searcher scrapped. Avenger transferred to India. Smiter wrecked off Lagos April 25, 1949.  
**ANZIO** (ex-LST (3) 3003)      **PURSUER** (ex-LST (3) 3504)      **THRUSTER** (ex-LST (3) 3520)  
**BATTLER** (ex-LST (3) 3015)      **RAVAGER** (ex-LST (3) 3505)      **TROMSO** (ex-LST (3) 3006)  
**CHASER** (ex-LST (3) 3029)      **ST. NAZAIRE** (ex-LST (3) 3517)      **VAGSO** (ex-LST (3) 3019)  
**PUNCHER** (ex-LST (3) 3036)      **SLINGER** (ex-LST (3) 3510)  
**LST (3) 3031**  
Note.—These two are AA. Firing Ships.

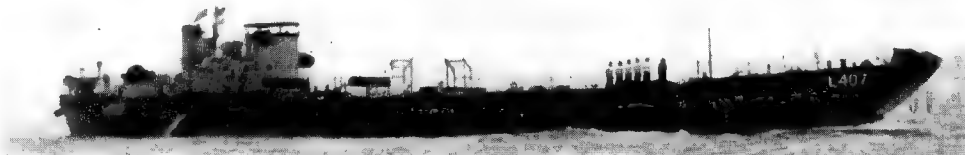


BEN LOMOND, 1951, A. & J. Pavia.  
**BEN LOMOND** (L 3102, ex-LST (Q) 2, ex-LST (3) 3013)      **BEN NEVIS** (L 3101, ex-LST (Q) 1 ex-LST (3) 3012)  
Notes.—All above ships have particulars in common with Messina and Narvik (see previous page). LST (3) 3001, 3009, 3021, 3024, 3028, 3037 and 3509 are on charter to War Office, while LST (3) 3041, 3507, 3512, 3519 and 3534 are on commercial charter: they are available for recall in emergency. LST (3) 3002, 3007, 3020, 3502, 3503 and 3506 are on loan to the Royal Hellenic Navy. LST 322 returned from Royal Hellenic Navy May 1953. Ben Lomond, Headquarters Ship for bacteriological defence trials, has deck-house forward and mast amidships.

Major Landing Craft.



LCT (8) 4001, 1954, A. & J. Pavia.  
**LCT (8) 4001**      **LCT (8) 4339**      **LCT (8) 4044**      **LCT (8) 4362**      **LCT (9) 4085**      **LCT (8) 4128**  
**LCT (8) 4002**      **LCT (8) 4040**      **LCT (8) 4045**      **LCT (8) 4053**      **LCT (8) 4086**      **LCT (8) 4148**  
**LCT (8) 4025**      **LCT (8) 4041**      **LCT (8) 4049**      **LCT (8) 4064**      **LCT (8) 4097**      **LCT (8) 4156**  
**LCT (8) 4037**      **LCT (8) 4042**      **LCT (8) 4050**      **LCT (8) 4073**      **LCT (8) 4098**      **LCT (8) 4164**  
**LCT (8) 4038**      **LCT (8) 4043**      **LCT (8) 4061**      **LCT (8) 4074**      **LCT (8) 4099**      **LCT (8) 4165**  
Displacement : 895 tons (loaded)  
Dimensions : 225 × 39 × 3½ (forward), 5 (aft) feet (Beaching Draughts)  
Machinery : 4 Paxman engines. B.H.P. : 1,840 = 12.6 kts.  
**PELANDOK** (ex-LCT (E) 341)      **LCT (E) 413**  
Note.—Pelandok is on loan to Malayan Naval Force.



LCT (4) 407, 1951, J. W. Kennedy  
**LCT (4) 403** (ex-1220)      **LCT (4) 405** (ex-523)      **LCT (4) 407** (ex-1186)  
**LCT (4) 404** (ex-1231)      **LCT (4) 406** (ex-941)      **LCT (4) 408** (ex-1202)  
Displacement : 350 tons standard, 586 tons (loaded)  
Dimensions : 187½ × 38½ × 3½ (forward), 4½ (aft) feet  
Guns : 2—20 mm. AA.  
Machinery : B.H.P. : 920 = 10 kts.  
Complement : 12

Note.—Rhine Flotilla. Can carry nine 40-ton tanks or 500 fully equipped men. LCT 607, 619, 620 and 625 returned from Royal Hellenic Navy 1953.

Minor Landing Craft.

51 LCM (7).

7,000 Series

Displacement : 63 tons (loaded)  
Dimensions : 60½ × 16 × 3½ feet  
Machinery : B.H.P. : 290 = 9.8 kts.

Note.—There are 51 LCM (7)s ranging from No. 7007 to No. 7216.

286 LCA.

1,000 Series

Note.—There are 286 LCA's ranging from No. 1010 to No. 1992, not including 13 on loan to the Royal Hellenic Navy.

10 LCP (L).

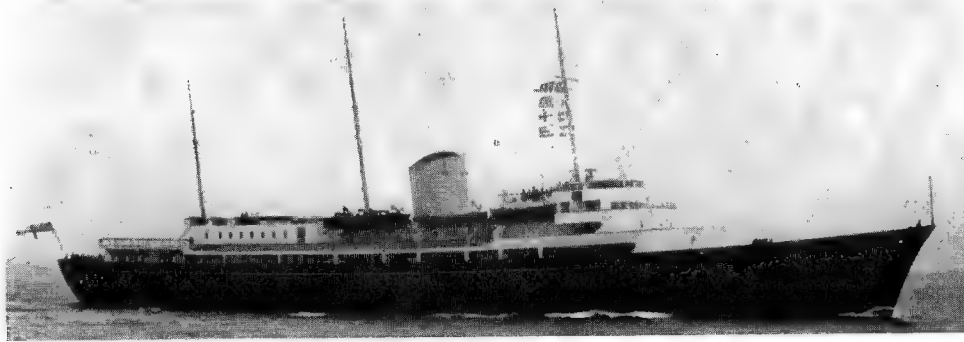
500 Series

Note.—There are 10 LCP (L)s ranging from No. 519 to No. 561.

General Note.—Including those on loan to other navies and those on charter, there are 56 landing ships, all but 2 being of the LST(3) type. There are also 398 landing craft, including 38 LCTs, 51 LCMs, 299 LCAs, and 10 LCPs.



## Royal Yacht/Hospital Ship.



BRITANNIA.

1954, Wright & Logan.

### BRITANNIA

Builders :	John Brown & Co., Ltd., Clydebank
Launched :	16 Apr. 1953
Completed :	Jan. 1954
Displacement :	3,990 tons light (4,715 tons full load)
Measurement :	5,769 tons gross
Dimensions :	Length : 360 feet (pp.), 412½ feet (o.a.), 380 feet (w.l.). Beam : 55 feet. Draught : 15½ (mean at load), 16 (max.) feet
Machinery :	Single reduction geared steam turbines. 2 shafts. S.H.P. : 12,000
Boilers :	2
Speed :	21 kts. (approx.) continuous cruising speed. 22-75 kts. (trials)
Radius :	2,100 miles at 20 kts., 2,400 miles at 15 kts.
Oil fuel :	350 tons (can be increased to 490 tons)
Complement :	271

Notes.—Small naval hospital ship, used by Her Majesty The Queen in time of peace as a Royal Yacht. Endurance sufficient to enable her to undertake long ocean voyages. Three masts and one funnel. Construction conforms to mercantile practice. Replaces the *Victoria and Albert* which is now no longer seaworthy. Modified cruiser stern and raked bow. Fitted with stabiliser to reduce roll in bad weather. Cost £2,098,000.

## Torpedo Firing Ship.



SAREPTA.

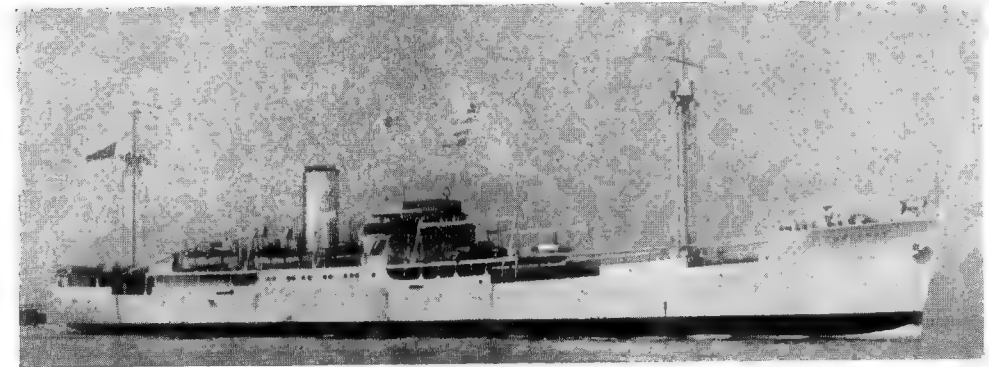
1951, Wright & Logan.

### SAREPTA (ex-Freida Peters)

Launched :	1920
Displacement :	465 tons standard
Tubes :	4—21 inch

Notes.—Ex-German. Dual-purpose torpedo experimental vessel and torpedo-firing ship.

## Store Carrier/Distilling Vessel.



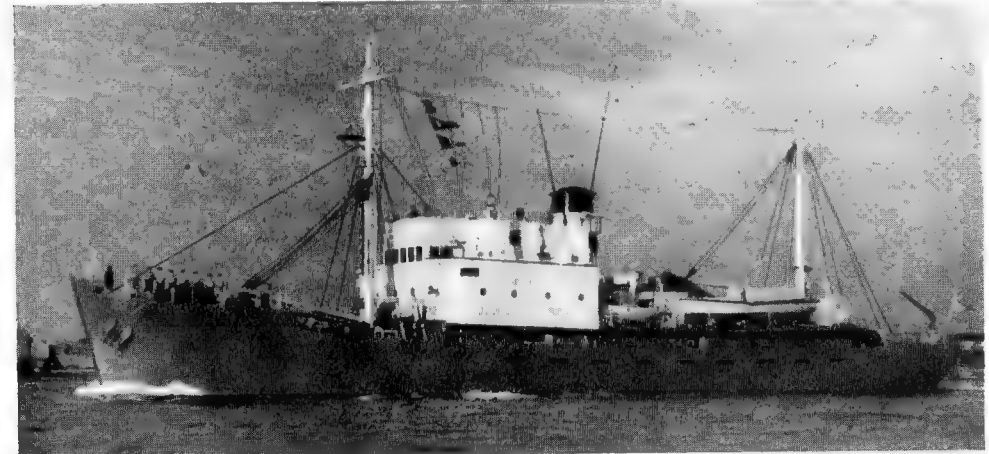
1954, J. W. Kennedy.

### BACCHUS

Builders :	Caledon Shipbuilding & Engineering Co., Ltd.
Launched :	15 July 1936
Displacement :	5,150 tons standard (5,790 tons full load)
Dimensions :	320 (pp.), 337½ (o.a.) × 49 × 18 (max.) feet
Machinery :	Triple expansion. I.H.P. : 2,000 = 12 kts.
Boilers :	3 cylindrical
Oil fuel :	643 tons
Complement :	44

Note.—Equipped with distilling plant for supplying naval vessels with fresh water. Deadweight capacity : 3,300 tons.

## Submarine Rescue Ships.



RECLAIM.

1951, J. W. Kennedy.

### RECLAIM (ex-Salverdant)

Displacement :	1,700 tons (Kingfisher 1,600 tons)
Dimensions :	200 (pp.), 217½ (o.a.) × 38 × 13½ max.) feet
Machinery :	Triple expansion by Aitchison Blair Ltd. 2 shafts. I.H.P. : 1,500 = 12 kts.
Complement :	84 (Kingfisher 82)

### KINGFISHER (ex-King Salvor)

### SEA SALVOR

Notes.—*Reclaim* is tender to *Vernon* Establishment for deep-diving experiments ; is also equipped for submarine rescue work. *Kingfisher*, converted from salvage vessel to submarine rescue bell ship 1953-54. *Reclaim* and *Kingfisher* built by Wm. Simons & Co., Ltd., Renfrew, launched 12 Mar. 1948 and 18 May 1942, respectively. *Sea Salvor* built by Goole S.B. and Repair Co., Ltd., launched 22 Apr. 1943.

## GREAT BRITAIN—Salvage and Cable Vessels

### Salvage Vessels.



SWIN.

1951, Wright & Logan.

#### DISPENSER KINBRACE

Displacement :  
Dimensions :  
Machinery :  
Boilers :  
Complement :

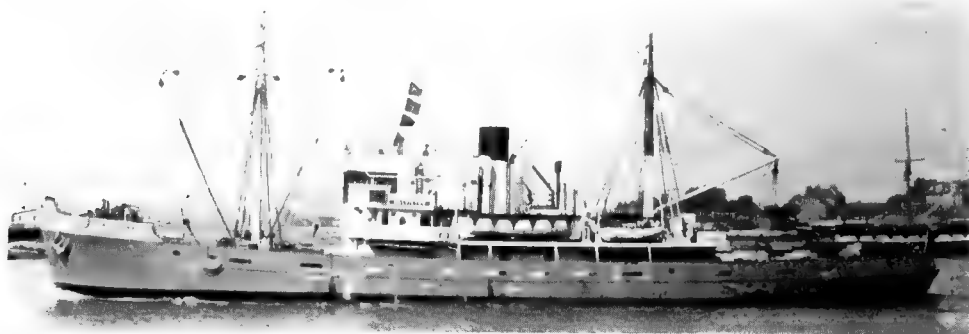
#### KINGARTH KINLOSS

950 tons standard (1,050 tons full load). (775 tons gross, 261.6 tons register).  
150 (pp.), 179½ (o.a.) × 39½ × 9½ (mean) 11 (max.) feet  
Triple expansion. 1 shaft. I.H.P.: 600 = 9 kts.  
1 return tube cylindrical (30 ton)  
34

#### LIFELINE SUCCOUR

#### SWIN UPLIFTER

Notes.—Uplifter, built by Smiths Dock Co. Ltd., is only vessel of this class wearing White Ensign. Laid down 13 Feb. 1943, launched 29 Nov. 1943, completed 6 Apr. 1944. Lifeline on charter to private firm. Remaining ships wear Blue Ensign.



SALVICTOR.

1952, C. Parsons.

#### OCEAN SALVOR PRINCE SALVOR

Displacement :  
Dimensions :  
Machinery :  
Oil fuel :  
Complement :

#### SALVAGE DUKE SALVALOUR

1,440 tons (1,700 tons full load)  
200½ (pp.), 216 (o.a.) × 37½ × 13 (max.) feet  
Triple expansion. 2 shafts. I.H.P.: 1,500 = 12 kts.  
310 tons  
52 to 72

#### SALVESTOR SALVICTOR

#### SALVIGIL SALVIOLA

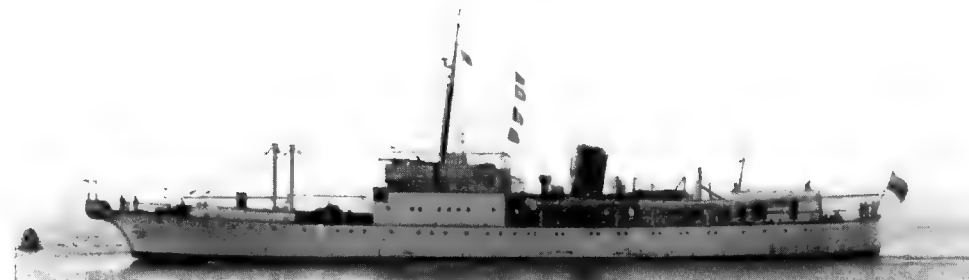
Notes.—All launched 1942-45. Salvage Duke on charter to Turkish Salvage Administration (renamed Imroz). Salvature on loan to Greece

#### SALVEDA

Displacement : 1,250 tons standard (1,360 tons full load)  
Dimensions : 184 (pp.), 194 (o.a.) × 34½ × 11½ (mean) feet  
Guns : 4—20 mm.  
Machinery : H.P.: 1,200 12 kts.  
Oil fuel : 150 tons  
Complement : 62

### Cable Vessels.

#### 2 "Bull" Class.



BULLFINCH.

1951, Abrahams.

BULLFINCH (Aug. 19, 1940)

ST MARGARETS (Oct., 1943)

Displacement : 1,524 tons gross  
Dimensions : 252 (o.a.) × 36½ × 16½ (mean) feet  
Guns : 1—4 inch, 4—20 mm. AA.  
Speed : 12 kts.

Notes.—Both built by Swan, Hunter & Wigham Richardson, Ltd. Launch dates above. Bullfrog and Bullhead of this type, were transferred to Cable and Wireless service in 1947.

#### 1 "Lasso" Class.



LASSO.

1951, J. W. Kennedy.

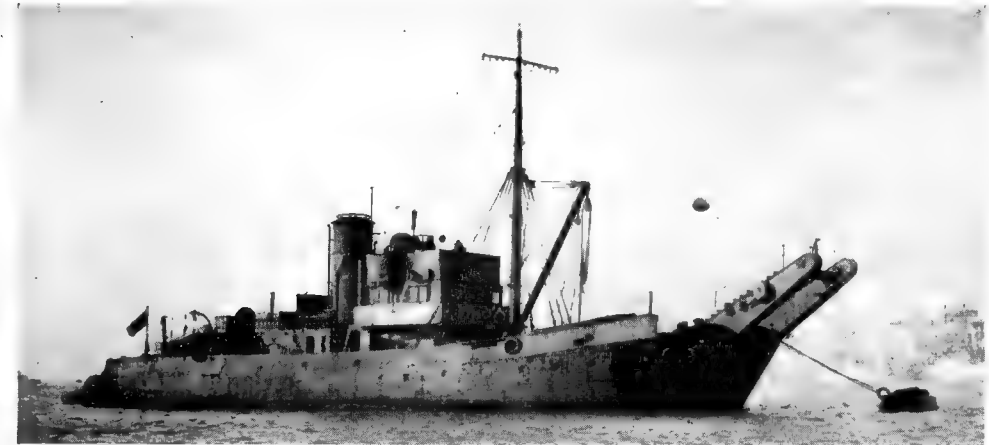
#### LASSO

Builders : J. I. Thornycroft & Co. Ltd.  
Launched : 17 Mar. 1938  
Displacement : 903 tons  
Dimensions : 180 (pp.), 205 (o.a.) × 35½ × 9½ feet  
Machinery : Triple expansion. I.H.P.: 1,100 = 13 kts.

Notes.—Built under 1936 Estimates. Recently employed as tender to Anti-Submarine School, Portland.

## Boom Defence, Working and Mooring Vessels—GREAT BRITAIN

### Boom Defence Vessels—continued. 10 "Net" Class.



MARTINET.

6 Blyth, D.D. & S.B. Co.

FALCONET (ex-Barnham, Dec. 5, 1938)

BOWNET (Jan. 19, 1939)

BURDONET (March 14, 1939)

DRAGONET (June 2, 1939)

SIGNET (May 3, 1939)

SONNET (1939)

1951, Wright & Logan.

2 Smith's Dock

MAGNET (ex-Barnsley, Nov. 22, 1938)

MARTINET (ex-Barnstone, Dec. 8, 1938)

2 Lobnitz

PLANET (ex-Barwell, Dec. 26, 1938)

PLANTAGENET (ex-Barwood, Feb. 23, 1939)

Displacement:

530 tons standard (750 tons full load)

Dimensions:

135 × 30½ × 9 feet

Machinery:

Triple expansion. I.H.P.: 850 = 11.5 kts.

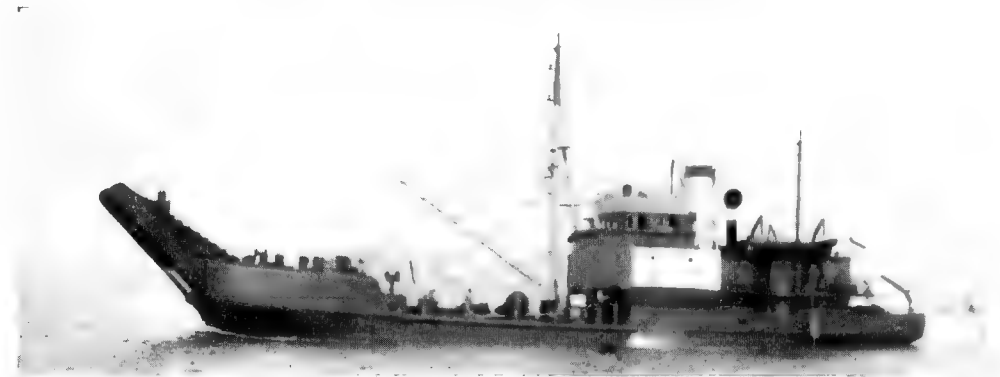
Boilers:

Cylindrical

Notes.—Authorised under 1937 and 1938 Estimates. Launch dates above. Machinery by North-Eastern Marine Engineering Co. Ltd., in Bownet, Burdonet, Dragonet; by White's Marine Engineering Co., Ltd., in Signet, Sonnet. War loss: Bayonet.

### Boom Working and Mooring Vessels.

18 "Moor" Class.



MOORHEN.

MOORBURN  
MOORCOCK  
MOORDALE  
MOORESS

MOORFIELD  
MOORFIRE  
MOORFLY

MOORFOWL  
MOORGATE  
MOORGRASS

MOORGRIEVE  
MOORHEN  
MOORHILL  
MOORLAND

1951, J. W. Kennedy.

MOORMYRTLE  
MOORPOUT  
MOORSIDE  
MOORSMAN

Displacement:

1,000 tons standard

Dimensions:

160 × 34 × — feet

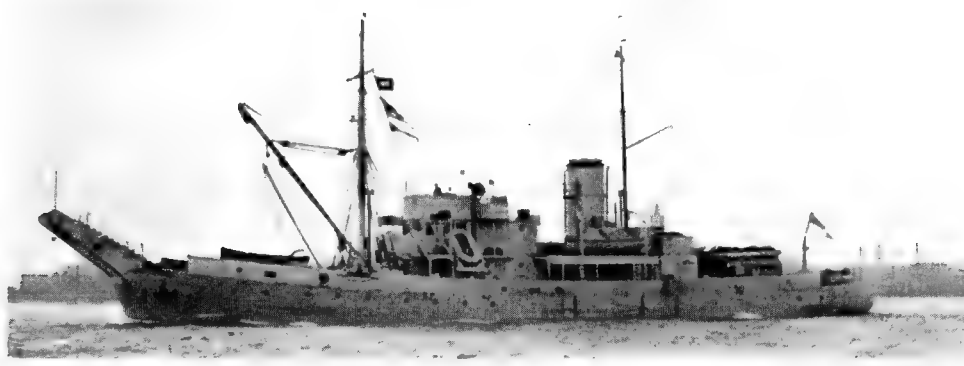
Machinery:

I.H.P.: 500 = 9 kts.

Notes.—Built 1938—46. Employed as Boom Defence Vessels, Boom Working Vessels, Mooring Vessels and Salvage Vessels. Fitted with salvage pumps, air compressors and diving equipment.

### Boom Defence Vessels.

62 "Bar" Class.



BARNDALE.

1951, J. W. Kennedy.

4 Ardrossan Dockyard

BARBECUE (Dec. 19, 1944)

BARCAROLE (March 14, 1945)

BARHOLM (Dec. 31, 1942)

BARTIZAN (May 20, 1943)

14 Blyth D.D. & S.B. Co.

BARBAIN (Jan. 8, 1940)

BARBETTE (Dec. 15, 1937)

BARBICAN (March 14, 1938)

BARBOUR (April 9, 1941)

BARBROOK (May 28, 1938)

BARCASTLE (July 23, 1938)

BARCLOSE (July 9, 1941)

BARCOCK (Sept. 3, 1941)

BARCOTE (Feb. 8, 1940)

BARDELL (Jan. 12, 1942)

BARDOLE (April 14, 1942)

BARLAKE (Sep. 16, 1940)

BARMILL (Oct. 16, 1940)

BARNSTONE (Nov. 25, 1939)

5 Ferguson Bros.

BARBERRY (1943)

BARHILL (1942)

BARKIS (1945)

BARSPER (1943)

BARWIND (1943)

2 Hall, Russell

BARRAGE (Dec. 2, 1937)

BARRANCA (Jan. 18, 1938)

4 Charles Hill

BARONIA (April 23, 1941)

BAROVA (July 5, 1941)

BARRICADE (ex-Ebgate, Feb. 7, 1938)

BARRIER (ex-Bargate, May 17, 1938)

2 Goole S.B. & R. Co.

BARCOMBE (July 28, 1938)

BARCROFT

7 John Lewis

BARFIELD (July 28, 1938)

BARFOOT (Sep. 25, 1942)

BARGLOW (Nov. 9, 1942)

BARILLA (Jan. 7, 1943)

BARLEYCORN (March 6, 1943)

BARNARD (July 1, 1942)

BARNEATH (Aug. 27, 1942)

7 Lobnitz

BARBRIDGE

BARCLIFF (ex-Barwick, May 10, 1940)

BARKING

BARLANE (June 27, 1938)

BARNDALE (Nov. 30, 1939)

BARNWELL (Feb. 13, 1940)

BARTHORPE (March 22, 1940)

4 Philip

BARBASTEL (1945)

BARFOIL (July 18, 1942)

BARITONE (1945)

BARON (1944)

13 Simons

BARBOURNE

BARFOAM

BARFORD

BARFOSS (Feb. 17, 1942)

BARFOUNT

BARLOW (Aug. 26, 1938)

BARMOND (Dec. 24, 1942)

BARMOUTH (Oct. 11, 1938)

BARNABY

BARRHEAD

BARRINGTON

BARSING

BAROUND

Displacement:

750 tons (960 tons full load)

Dimensions:

150 (pp.), 173½ (o.a.) × 32½ × 9½ feet

Guns:

1—3 inch AA. (war). Nil in majority in peace.

Machinery:

Triple expansion. I.H.P.: 850 = 11.75 kts.

Boilers:

2 S.E.

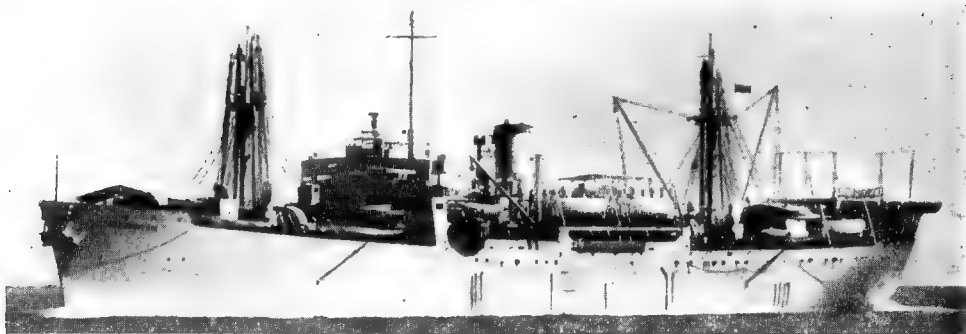
Complement:

32

Notes.—Built under 1935, 1936, 1937, 1939 and War Estimates. Launch dates above. Two transferred to South African Naval Force and two to Turkey. Barcock was on charter to Belgium, but was returned to the Royal Navy Aug. 24, 1949. Barilla and Barndale used for Ship Target Trials, 1949–50. Barstoke transferred to Burma and Barnehurst to Netherlands. Barglow brought forward from reserve in 1951 and manned by civilian crew to survey wrecks in Dover Straits. War losses: Barflake, Barlight.

GREAT BRITAIN—Fleet Supply and Replenishment Ships

Fleet Supply Ships.  
8 "Fort" Class.



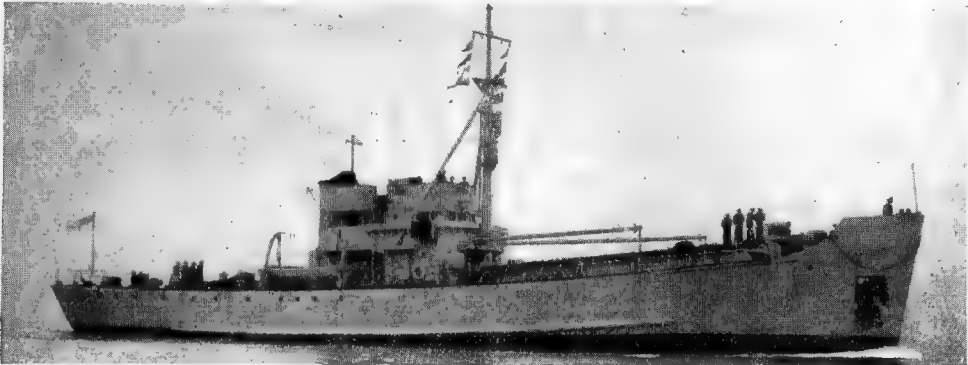
FORT DUQUESNE. 1953, Lieut. Aldo Fraccaroli.

FORT BEAUHARNOIS FORT CHARLOTTE	FORT CONSTANTINE FORT DUNVEGAN	FORT DUQUESNE FORT LANGLEY	FORT ROSALIE FORT SANDUSKY
Displacement : 9,788 tons			
Dimensions : 424½ × 57 × 27 feet			
Machinery : Triple expansion. I.H.P. : 2,500 = 11 kts.			
Boilers : 2 Babcock & Wilcox			

Notes.—All launched 1944. *Fort Beauharnois*, *Fort Charlotte*, *Fort Duquesne* (helicopter landing platform aft) are Store-Issue Ships. *Fort Rosalie* and *Fort Sandusky* are Armament Store Carriers. These ships are Royal Fleet Auxiliaries, except for *Fort Langley* which is officially listed as a Merchant Fleet Auxiliary. They are similar in type to the Maintenance Ships of the "Mull" and "Head" classes, see earlier page.

**SEA FOX**  
Notes.—Former Aircraft Transport (Small) now used as a Fleet Supply Ship (Victualling store issue ship). Same type as Aircraft Transport below. Built by James Pollock, Sons & Co., Ltd., Faversham.

Aircraft Transports.



SKUA. BLACKBURN	RIPON	ROC SKUA (ex-Walrus)
1954, Wright & Logan.		
Displacement : 990 tons (1,500 tons full load)		
Dimensions : 210 (o.a.) × 35 × 13½ feet		
Machinery : Crossley 2-stroke Diesels. B.H.P. : 960 = 10.5 kts.		
Oil fuel : 60 tons		

Notes.—Rated as Aircraft Transports (Small). *Ripon* built by James Pollock, Sons & Co., Ltd., Faversham, others by Blyth D.D. & S.B. Co. Fitted with 6-ton and 12-ton derricks for handling aircraft. *Blackburn* is employed as a seagoing tender for the Clyde Division R.N.V.R.

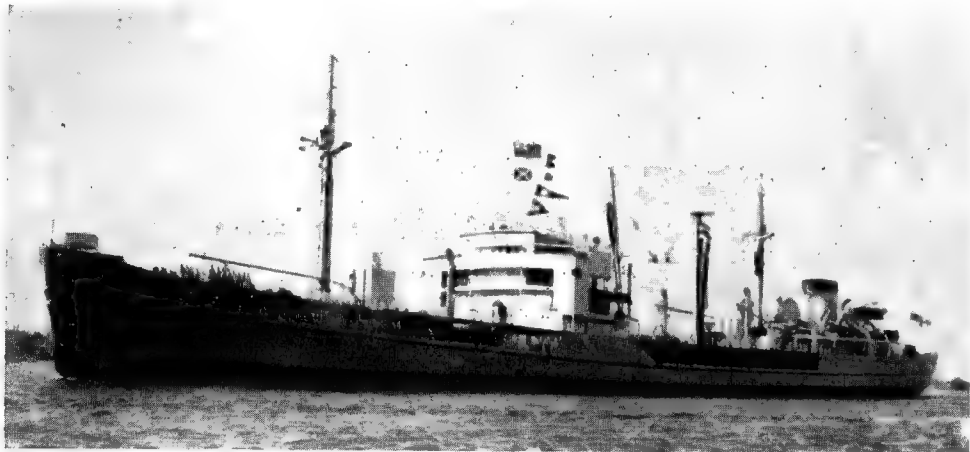
Fleet Replenishment Ships.

4 Fast Type. New Construction.

TIDEREACH	TIDERACE	TIDERANGE
Displacement :	26,000 tons full load	
Measurement :	17,700 tons deadweight	
Dimensions :	550 (pp.), 583 (o.a.) × 71 × 30 (max.) feet	
Machinery :	Geared turbines	

Notes.—*Tidereach*, launched by Swan, Hunter & Wigham Richardson, Ltd., Wallsend-on-Tyne, 2 June 1954, is the first of the Admiralty's new class of Fleet Replenishment Tankers. Main machinery by Wallsend Slipway Company. Design is apparently based on that of the *Bulawayo* of which *Tidereach* is a modern version. *Tiderange* launched at Sir James Laing & Sons, Ltd., Sunderland, 1 July 1954. *Tiderace* launched at J. L. Thompson & Sons, Ltd., Sunderland, 30th August, 1954, main machinery of both by North Eastern Marine Engineering Co., Ltd., Wallsend-on-Tyne. A fourth ship is being built for Australia.

1 Ex-German Type.



Added 1950 J. W. Kennedy.

**BULAWAYO** (ex-Northmark, ex-Nordmark, ex-Westerwald)

Builders :	Schichau, Elbing
Laid down :	14 Nov. 1936
Launched :	5 Oct. 1937
Completed :	6 Jan. 1939
Displacement :	15,000 tons (22,500 tons full load), 10,847 tons gross register
Dimensions :	549 (pp.), 584 (o.a.) × 72½ × 30½ (max.) feet
Guns :	2—4 inch AA., 4—40 mm. Bofors AA., 2—20 mm. Oerlikon AA.
Machinery :	Double-reduction geared turbines. 2 shafts. S.H.P. (designed): 21,590 = 21 kts. exceeded with 23 065 H.P.)
Boilers :	2 Wagner
Oil fuel :	2,500 tons
Complement :	292

Notes.—Formerly German fast fleet attendant oiler and supply ship, seized as a naval prize. Possesses stowage for over 10,000 tons of oil fuel, 306 tons lubricant, and other stores, in addition to petrol, water and supplies of all kinds, including food and clothing. Employed as Senior Officer's Ship, Fleet Train, 1947-48. Extensive refit 1948-49, being equipped with two cargo lifts. Reduced to Reserve 1950.



## 2 "Surf" Class.



SURF PIONEER.

1953, Skyfotos.

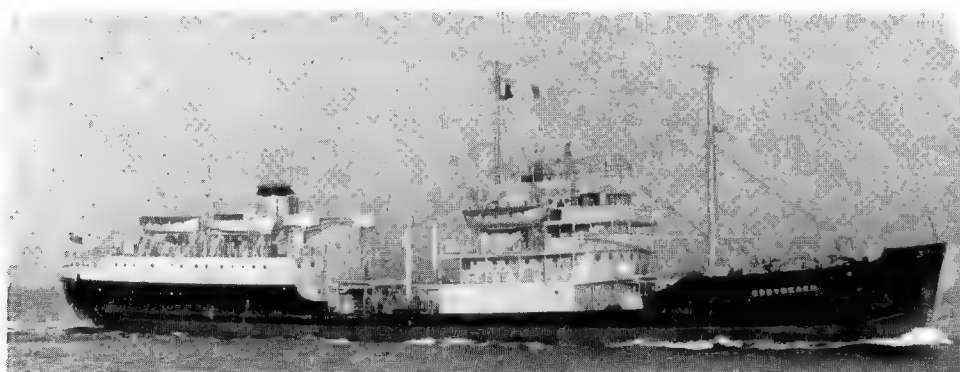
**SURF PATROL** (ex-Tatry, 7 Feb., 1951)

**SURF PIONEER** (ex-Beskidy, 23 Apr., 1951)

Measurement : 7,600 tons gross  
Dimensions : 445 (pp.),  $\times$  60½  $\times$  27½ (max.) feet  
Machinery : Doxford 4-cyl. Diesels. B.H.P. : 4,250 = 13.75 kts.

Notes.—Taken over by Great Britain whilst building by Bartram's, Sunderland, for Poland. 11,000 tons deadweight.

## 8 "Eddy" Class.



EDDYBEACH

1952, courtesy Builders

**EDDYBAY**  
**EDDYBEACH**

**EDDYCLIFF**  
**EDDYCREEK**

**EDDYFIRTH**  
**EDDYNESS**

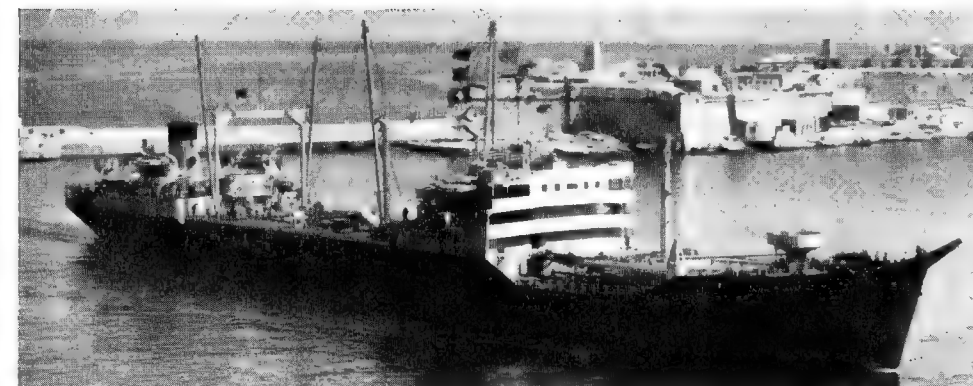
**EDDYREEF**  
**EDDYROCK**

Measurement : 2,157 to 2,300 tons gross  
Deadweight Capacity : 2,095 tons  
Dimensions : 270 (pp.), 286 (o.a.)  $\times$  44  $\times$  17½ feet  
Machinery : One set steam triple expansion engines. 227 r.p.m.  
Boilers : 1 shaft. I.H.P. : 1,750 = 12 kts. in service  
2 oil burning cylindrical

Notes.—A new class of Fleet Attendant Oil Tankers. Single screw vessels built for the Naval Stores Department of the Admiralty. Constructed on the combined transverse and longitudinal system of framing and classed 100 A1 at Lloyds to their latest requirements for the carriage of petroleum in bulk. Carry about 2,000 tons at moderate draught. Main propelling machinery built by Lobnitz & Co., Ltd., for all ships of the class, boilers by Caledon S.B. & Eng. Co., Ltd.

Name	Builders	Launched	Completed
Eddybay	Caledon Shipbuilding & Engineering Co., Ltd., Dundee	29 Nov. 1951	1952
Eddybeach	Caledon Shipbuilding & Engineering Co. Ltd., Dundee	25 Apr. 1951	1951
Eddycliff	Blythwood Shipbuilding & Engineering Co., Ltd., Scotstoun	28 Aug. 1952	Feb. 1953
Eddycreek	Lobnitz & Co., Ltd., Renfrew	19 Jan. 1953	1953
Eddyfirth		10 Sep. 1953	1954
Eddyiness	Blyth Dry Docks & Shipbuilding Co., Ltd., Blyth	1954	1954
Eddyreef	Caledon Shipbuilding & Engineering Co., Ltd., Dundee	28 May 1953	1954
Eddyrock	Blyth Dry Docks & Shipbuilding Co., Ltd., Blyth	16 Dec. 1952	1953

## 20 "Wave" Class.



WAVE BARON (rigged for oiling at sea)

1954, A. & J. Pavia.



WAVE MASTER.

1953, Skyfotos.

12 Furness S.B. Co.

**WAVE BARON** (ex-Empire Flodden, Feb. 19, 1946)

**WAVE COMMANDER** (ex-Empire Paladin, April 21, 1944)

**WAVE CONQUEROR** (ex-Empire Law, Nov. 27, 1943)

**WAVE EMPEROR** (Oct. 16, 1944)

**WAVE GOVERNOR** (Nov. 30, 1944)

**WAVE LIBERATOR** (ex-Empire Milner, Feb. 9, 1944)

**WAVE PREMIER** (June 27, 1946)

**WAVE PROTECTOR** (ex-Empire Protector, July 20, 1944)

**WAVE REGENT** (March 29, 1945)

**WAVE RULER** (ex-Empire Evesham, Jan. 17, 1946)

**WAVE SOVEREIGN** (Nov. 20, 1945)

**WAVE VICTOR** (ex-Empire Bounty, Sept. 30, 1943)

3 Harland & Wolff (Govan)

**WAVE CHIEF** (ex-Empire Edgehill, April 4, 1946)

**WAVE KING** (April 6, 1944)

**WAVE MONARCH** (July 6, 1944)

5 Laing

**WAVE DUKE** (ex-Empire Mars, Nov. 16, 1944)

**WAVE KNIGHT** (ex-Empire Naseby, Oct. 22, 1945)

**WAVE LAIRD** (ex-Empire Dunbar, April 3, 1946)

**WAVE MASTER** (ex-Empire Salisbury, May 20, 1944)

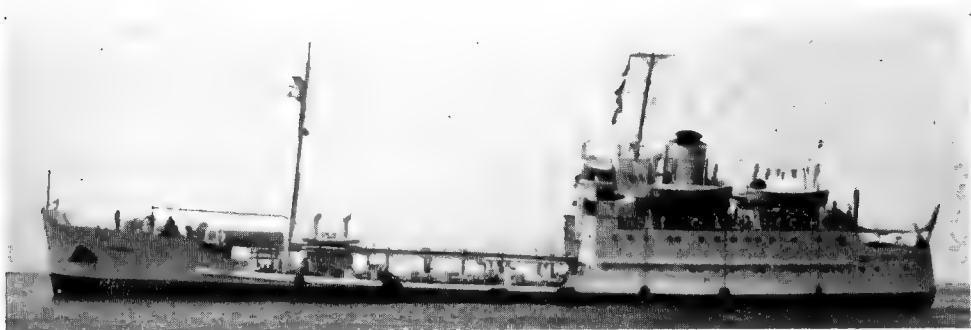
**WAVE PRINCE** (ex-Empire Herald, July 27, 1945)

Displacement : 8,200 tons standard (16,476 to 16,485 tons full load)  
Deadweight capacity : 11,900 tons  
Dimensions : 465½ (pp.), 492½ (o.a.)  $\times$  64½  $\times$  28½ feet  
Guns : Light AA. in wartime  
Machinery : Double reduction geared turbines, of Metrovick type in Wave Baron, Wave Chief, Wave Commander, Wave Conqueror, Wave Duke and Wave Laird, Parsons type in others. S.H.P.: 6,800 = 15 kts.  
Boilers : 3-drum type

Notes.—Launch dates above. Wave Liberator has different type of bridge.

GREAT BRITAIN—Oilers

4 Later “OI” Class.



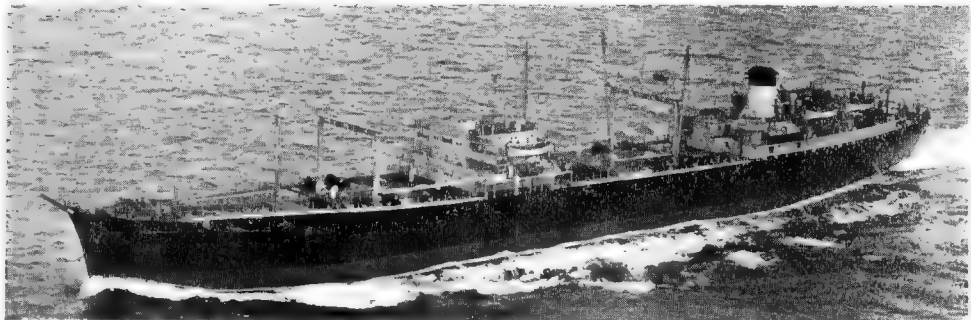
ROWANOL.

1951, Lieut. Aldo Fraccaroli.

BIRCHOL	OAKOL	ROWANOL (ex-Cedarol ex-Ebonol)	TEAKOL
Displacement:	2,670 tons		
Deadweight capacity:	1,050 tons		
Dimensions:	218 (pp.), 232 (o.a.) × 39 × 15½ feet		
Machinery:	Triple expansion. I.H.P.: 1,140 = 11 kts.		
Complement:	26		

Notes.—All built by Lobnitz. Launched 19 Feb. 28 Aug., 15 May and 14 Nov. 1946 respectively.

1 Large Type.



1953, Skyfotos.

OLNA	Builders : Launched :	Swan, Hunter & Wigham Richardson, Ltd., Wallsend-on-Tyne 28 Dec. 1944
	Displacement :	17,000 tons standard (25,096 tons full load)
	Deadweight capacity:	17,500 tons
	Dimensions:	550 (pp.), 583½ (o.a.) × 70½ × 31½ feet
	Guns:	1—4 inch AA. 4—40 mm. AA., 8—20 mm. AA.
	Armour :	1½ in. deck
	Machinery:	Turbo-electric. S.H.P.: 13,000 = 17 kts
	Boilers:	3 Babcock & Wilcox
	Oil fuel:	2,130 tons
	Deadweight capacity:	17,500 tons
	Complement:	77

5 “Ranger” Class.



BLACK RANGER.

1951, Wright & Logan.

2 Caledon S.B. Co. GOLD RANGER (March 12, 1941) GREEN RANGER (Aug. 21, 1941)	3 Harland & Wolff (Govan) BLACK RANGER (Aug. 22, 1940) BLUE RANGER (Jan. 29, 1941) BROWN RANGER (Dec. 12, 1940)
--	--

Measurement :	3,313 to 3,417 tons gross
Dimensions :	First two, 339½ (pp.), 355½ (o.a.) × 47 × 20 feet ; other three, 349½ (pp.), 365½ (o.a.) × 47 × 20 feet
Machinery :	Diesel. B.H.P. : 2,750 = 12 kts.

Notes.—Launch dates above. Funnel in these ships is on port side. All are fitted with special derrick on the beam to facilitate fuelling at sea. War loss : Gray Ranger (Caledon).

8 Later “Dale” Class.



ENNERDALE.

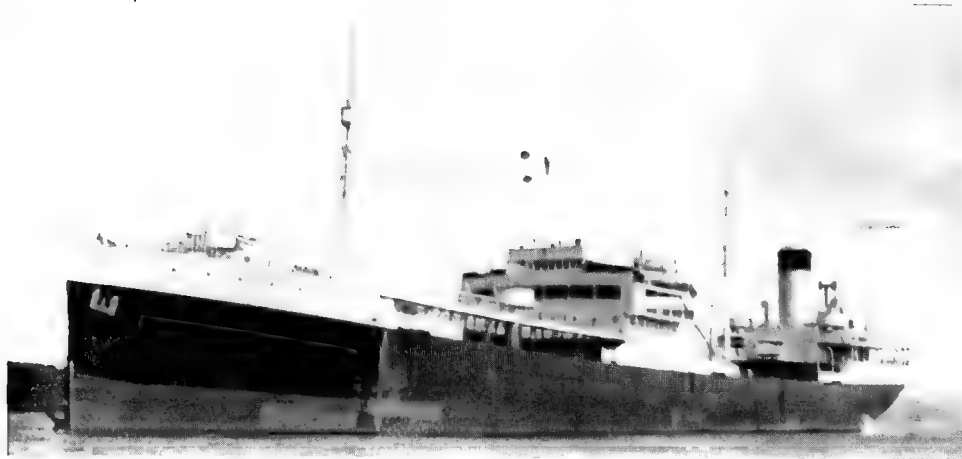
1950, P. A. Vicary.

1 Blythwood S.B. Co. CEDARDALE (March 25, 1939)	2 Furness S.B. Co. EAGLESDALE (1942) EASEDALE (Dec. 18, 1941)	1 Hawthorn Leslie ECHODALE (1941)
1 Cammell Laird DEWDALE (1941)	2 Harland & Wolff (Govan) DERWENTDALE (1941) DINGLEDALE (1941)	1 Swan Hunter ENNERDALE (1941)

Displacement :	17,000 tons
Deadweight capacity :	12,000 tons
Dimensions :	460 (pp.), 483 (o.a.) × 59 × 27½ (mean) feet
Guns :	1—40 mm. AA., 4—20 mm. AA. (removed from some ships)
Machinery :	Burmeister & Wain 4-cycle Diesels. B.H.P. : 3,500 = 11.5 kts.
Complement :	40

Notes.— Launch dates above. War losses : Cairndale, Darkdale, Dinsdale ex-Empire Norseman). In addition, Denbydale (ex-Empire Silver) was so badly damaged that she ceased to be sea-going.

4 Early "Dale" Class.



ARNDALE.

1952, courtesy, Peter W. McMillan, Esq.

1 Harland & Wolff (Govan)  
**BROOMDALE** (Sept. 2, 1937)

1 Lithgows  
**BISHOPDALE** (March 31, 1937)

2 Swan Hunter  
**ABBEYDALE** (Dec. 28, 1936)  
**ARNDALE** (Aug. 5, 1937)

Displacement : 17,338 tons (*Broomdale*), 17,357 tons (*Bishopdale*), 17,210 tons (other two)  
Dimensions :  $464\frac{1}{2}$  (pp.),  $481\frac{1}{2}$  (o.a.)  $\times$   $62 \times 27\frac{1}{2}$  (mean) feet  
Machinery : Doxford Diesels in first 2, Burmeister & Wain in others. B.H.P. : 4,000 = 11.5 kts.  
Own oil : 850 tons  
Complement : 40

Notes.—Launch dates above. Deadweight capacity : 11,650 tons. *Arndale* reported 8,503 tons gross. War losses : *Aldersdale*, *Boordale*

1 "War" Class.



1951, A. & J. Pavia.

WAR HINDOO

Builders : Wm. Hamilton & Co., Ltd., Port Glasgow  
Launched : 1919  
Displacement : 11,680 tons  
Deadweight capacity : 7,100 tons  
Dimensions :  $400 \times 52\frac{1}{2} \times 25\frac{1}{2}$  feet  
Machinery : Triple expansion. I.H.P. : 3,000 = 10 kts.  
Boilers : Cylindrical

Notes.—Used as hulk only. War losses : *War Diwan*, *War Mehtar*, *War Sepoy*, *War Sirdar*. Others have been discarded.

Oilers—continued.

5 "Ol" Class.



CELEROL.

1951, Wright & Logan.

**BELGOL** (Irvine's S.B. & D.D. Co.)  
**CELEROL** (Short Bros.)  
**FORTOL** (McMillan)

**PRESTOL** (Napier & Miller)  
**SERBOL** (Caledon S.B. Co.)

Displacement : 5,049 to 5,660 tons  
Dimensions :  $335 \times 41\frac{1}{2} \times 20\frac{1}{2}$  feet  
Machinery : I.H.P. : 3,375 = 14 kts.  
Boilers : Cylindrical  
Own oil : 300 tons  
Deadweight capacity : 2,000 tons  
Complement : 39

Notes.—All launched 1917. Builders in parentheses above. War losses : *Francol*, *Montenol*, *Slavol*.

6 Small "Ol" Class.



LARCHOL.

1951, Wright & Logan.

1 Barclay Curle  
**BOXOL**

2 Swan Hunter  
**ELDEROL**  
**ELMOL**

2 Lobnitz  
**LARCHOL**  
**LIMOL**

1 Tyne Iron S.B. Co.  
**PHILOL**

Displacement : 2,365 to 2,400 tons  
Dimensions :  $220 \times 34\frac{1}{2} \times 13\frac{1}{2}$  feet  
Machinery : Triple expansion. I.H.P. : 700 = 9 kts.  
Boilers : Cylindrical  
Own oil : 40 tons  
Deadweight capacity : 1,000 tons  
Complement : 19

Notes.—All launched 1917 except *Philol*, 1916. *Boxol* no longer in service at Gibraltar. War loss : *Birchol*.

## GREAT BRITAIN—Tenders, Petrol and Armament Carriers

### Tenders.



1946, Wright & Logan.

#### DEEPWATER (ex-Walter Holtzapfel)

Launched: 1940  
Displacement: 1,200 tons  
Dimensions: 246 (pp.), 260 (o.a.) × 38 × 13 (mean) feet  
Machinery: 2 sets Sulzer Diesels. B.H.P.: 1,750 = 17 kts.  
Complement: 61

Notes.—Ex-German deep diving ship. Relegated to harbour service at Portsmouth. Tender to Vernon for diving instruction. Now painted with black hull, red waterline and light grey upperworks but black funnel top.

#### CLEARWATER (ex-Lumme)

Displacement: 62 tons  
Dimensions: 85 × 15 × 4½ feet  
Machinery: 6-cyl. Diesel. B.H.P.: 180 = 9.5 kts.  
Complement: 9

Notes.—Ex-German. Tender to Torpedo and Anti-Submarine School, H.M.S. Vernon, Portsmouth. Employed as tug and tender to Reclaim.

#### DWARF

Builders: Philip & Son, Ltd., Dartmouth.  
Launched: 1936  
Displacement: 172 tons  
Dimensions: 83½ (pp.), 91 (o.a.) × 19 × 6½ (mean), 7 (max.) feet  
Machinery: 2 sets triple expansion. I.H.P.: 350 = 9.25 kts.  
Boiler: 1 cylindrical  
Coal: 16 tons

Note.—Tender to Third Submarine Flotilla, Rothesay.

#### REDWING

Builders: J. Samuel White & Co., Ltd., Cowes  
Launched: 19 Oct. 1933  
Displacement: 225 tons  
Dimensions: 112 (o.a.) × 25 × 6½ feet  
Machinery: 2 sets triple expansion. I.H.P.: 250 = 9.5 kts.  
Boiler: 1 cylindrical  
Complement: 12

Note.—Tender to Defiance, Torpedo School, Devonport.

#### DIPPER (ex-C 30)

Displacement: 120 tons  
Machinery: Diesel. Speed: 9 kts.

#### DIVER (ex-C 28)

Note.—Former German minelaying tenders, attached to 1st M/S Experimental Squadron, H.M.S. Lochinvar, Port Edgar, as Mine Location Vessels. Launched 1940.

#### MYITA

Note.—Base ship at Kilindini (East African Naval Force).

### Tenders—continued.



VESUVIUS.

1954, courtesy Godfrey H. Walker, Esq.

#### NIGHTINGALE (Sep. 30, 1931)

Displacement: 298 and 302 tons, respectively  
Dimensions: Nightingale: 110 (o.a.) × 24½ × 7½ feet  
Vesuvius: 106½ (o.a.) × 24½ × 7½ feet  
Machinery: 2 sets triple expansion. I.H.P.: 400 = 10 kts  
Boiler: 1 cylindrical  
Coal: 15 tons  
Complement: 15

Notes.—Both built at Portsmouth. Mining tenders to Vernon Establishment. Mainmast in Vesuvius removed 1950, in Nightingale 1951. Now painted with black hull, red waterline and light grey upperworks, but black funnels.

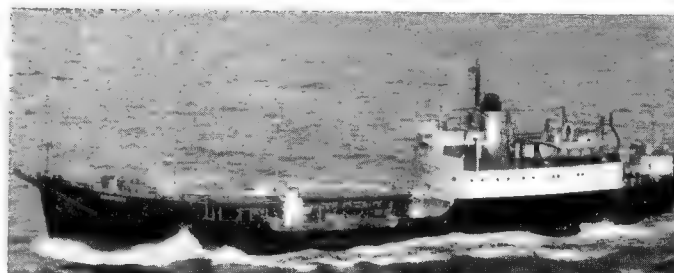
#### VESUVIUS (ex-Vernon, ex-Skylark, Nov. 15, 1932)

### Petrol Carriers.

#### RIPPLEDYKE (ex-Empire Tisbury, 1946)

Displacement: 1,782 tons  
Dimensions: 201 × 34 × 13 feet  
Capacity: 980 tons

### 2 "Sprite" Class.



AIRSPRITE.

1954, Wright & Logan.

#### AIRSPRITE (Dec. 22, 1942)

Measurement: 965 tons gross  
Dimensions: 204½ × 33½ × 12½ feet  
Machinery: Triple expansion. I.H.P.: 900 = 11 kts.

Note.—Both built by Blythwood S.B. Co. Launch dates above.

#### NASPRITE (Nov. 28, 1940)

#### PETROBUS

Builders: Dunlop, Bremne  
Launched: 1918  
Displacement: 1,024 tons  
Dimensions: 164 × 28 × 11½ feet  
Machinery: I.H.P.: 500 = 9 kts.  
Boilers: Cylindrical  
Own oil: 50 tons  
Deadweight capacity: 300 tons  
Complement: 16

### Naval Armament Carriers.



AMHERST.

1954, A. & J. Pavia.

#### AMHERST

Displacement: 5,337 tons  
Dimensions: 341½ × 45 × 20 feet  
Machinery: Reciprocating. 1 shaft  
Deadweight capacity: 1,600 tons

Notes.—Built by Blythwood Shipbuilding & Engineering Co., Ltd., Scotstoun.

#### ENFIELD GATLING

Displacement: 604 to 663 tons  
Length: 131½ to 144½ × 25 × 18 feet  
Capacity: 240 tons  
Complement: 13

Notes.—All built by Lobnitz & Co. Ltd., Renfrew, except Chattenden completed by Richards Iron Works, Lowestoft 1944 (engined by Crossley).

#### MAXIM NORDENFELT

#### SNIDER CHATTENDEN



THROSK.

1952, J. W. Kennedy.

#### KINTERBUY

Displacement: 1,770 tons  
Dimensions: 199½ × 34½ × 13 feet  
Machinery: Triple expansion. 1 shaft. I.H.P.: 900  
Coal: 154 tons  
Deadweight capacity: 600 tons

Notes.—Launched in 1943 and 1944, respectively. Both built by Philip & Son, Ltd.

#### THROSK

### Fishery Protection Gunboats. MFVs.

#### SQUIRREL (ex-MFV 1151)

Length: 75 feet  
Guns: 1—0.5 inch M.G. aft (in Watchful)

#### WATCHFUL (ex-MFV 1080)

Notes.—Fishery Protection Gunboats. Fitted with radar. Tenders to H.M.S. Osprey. 233 M.F.Vs. ranging from Nos. 2 to 1574 are employed for various subsidiary duties in the Fleet and in the dockyards. They are of four types, viz.: MFV 2 to 436. Length: 61½ feet. 122 in service. MFV 609 to 995. Length: 45 feet. 73 in service. MFV 1003 to 1239. Length: 75 feet. 75 in service. MFV 1505 to 1574. Length: 90 feet. 13 in service. MFV 1044, 1069, 1156 are armed with 1—40 mm. Bofors forward (in place of mast) and 1—20 mm. Oerlikon on after superstructure. MFV 1037 is Mine Location Vessel. MFV 206 is at Kilindini (East Africa Naval Force). MFV 189 is used for R.N.V.R. training in Mauritius. Panglima (ex-MFV 154) is at Singapore for Malayan R.N.V.R. training.



Store Carriers.



THOMAS GRANT. 1954, Wright & Logan.  
**ROBERT DUNDAS** (July 28, 1938) **ROBERT MIDDLETON** (June 29, 1938)  
Displacement : 900 tons  
Dimensions : 210 x 35 x 13½ (mean) feet  
Machinery : Atlas Polar Diesel by British Auxiliaries Ltd., Govan.  
Oil fuel : 1 shaft. B.H.P. : 960 = 10.5 kts.  
Deadweight capacity : 1,100 tons  
Complement : 17

Note.—Both built by Grangemouth Dockyard Co. Ltd. Launch dates above

Water Carriers.  
6 "Spa" Class.



SPALAKE. 1954, A. & J. Pavia.  
2 Charles Hill & Sons Ltd. 4 Philip & Son  
**SPALAKE** (Aug. 10 1946) **SPA** (Oct. 11 1941)  
**SPAPOOL** (Feb. 28 1946) **SPABECK** (June 21 1943) **SPABROOK** (Aug. 24 1944)  
**SPABURN** (Jan. 5 1946)

Displacement : 1,219 tons  
Dimensions : 160 (pp.), 163 (o.a.) x 30 x — feet  
Machinery : Triple expansion. I.H.P.: 675  
Boiler : 1  
Coal : 90 tons  
Deadweight capacity : 500 tons  
Note.—Spabek is now a spirit carrier.

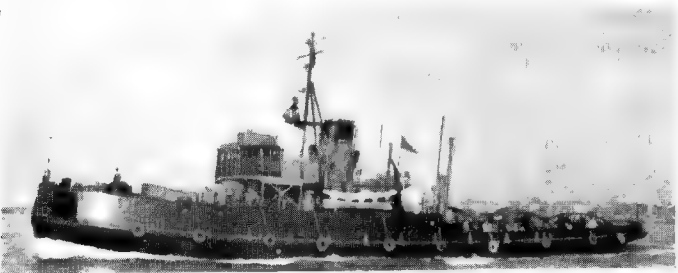
14 "Fresh" Class.

**FRESHBROOK** **FRESHFORD** **FRESHPOOND** **FRESHSPRING**  
**FRESHBURN** **FRESHLAKE** **FRESHPOOL** **FRESHRITA**  
**FRESHENER** **FRESHMERE** **FRESHSPRAY** **FRESHTARN**  
**FRESHET** **FRESHWELL**

Displacement : 594 tons  
Dimensions : 126½ x 25½ x 10½ (max.) feet  
Machinery : Triple expansion. I.H.P.: 450 = 9 kts.

Fleet Tugs.

**CONFIANCE** **CONFIDENT**  
Notes.—Under construction by A. & J. Inglis, Ltd., Glasgow. Propelled by twin screw diesels.

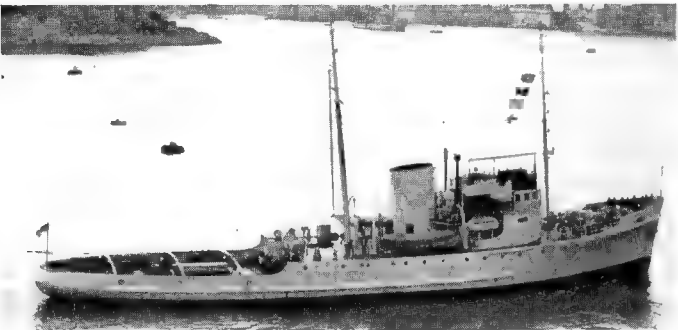


SAMSON. 1954, J. W. Kennedy.  
**SAMSON** (14 May, 1953) **SEA GIANT** (2 June, 1954) **SUPERMAN** (23 Nov., 1953)  
Dimensions : 180 x 37 feet  
Machinery : Triple expansion. 2 shafts.  
Notes.—All built and engined by Alexander Hall & Co., Ltd., Aberdeen.

"Envoy" Class.

**ENCORE** (Dec. 1944) **ENIGMA** (June, 1944)  
**ENFORCER** (July, 1944) **ENVOY** (Feb., 1944)  
Displacement : 868 tons (1,332 tons full load)  
Dimensions : 174½ x 36 x 17 (max.) feet  
Machinery : Triple expansion. I.H.P. = 1,700 = 13 kts.  
Boilers : 2 cylindrical  
Oil fuel : 398 tons  
Complement : 33  
Notes.—All built by Cochrane & Sons, Ltd. Launch dates above. Enticer lost Dec. 21 1946.

"Bustler" Class.



REWARD. 1952, A. & J. Pavia.  
**BUSTLER** (Dec. 4, 1941) **SAMSONIA** (April 1, 1942)  
**GROWLER** (Sept. 10, 1942) **TURMOIL** (July 14, 1944)  
**MEDIATOR** (June 21, 1944) **WARDEN** (June 28, 1945)  
**REWARD** (Oct. 13, 1944)

Displacement : 1,118 tons (1,630 tons full load)  
Dimensions : 190 (pp.), 205 (o.a.) x 41 x 13 (mean), 16 (max.) feet  
Machinery : 2 Atlas Polar 8-cyl. Diesels. 1 shaft. B.H.P.: 4,000 = 16 kts  
Oil fuel : 405 tons  
Range : 17,000 miles  
Complement : 42

Notes.—All built by Henry Robb, Ltd. Growler temporarily renamed Caroline Moller, while on long-term charter, renamed Castle Peak. Most of this class, including Bustler and Turmoil, have been chartered by commercial undertakings.

"Assurance" Class.

**ADHERENT** (ex-Tenacity, June 1940) **HENGIST** (Dec. 1941)  
**ALLEGIANCE** (Feb. 1943) **JAUNTY** (June 1941)  
**ALLIGATOR** **PROSPEROUS** (June, 1942)  
**ANTIC** (March, 1943) **RESTIVE** (Sept., 1940)  
**ASSIDUOUS** (June 1942) **SAUCY** (Oct., 1942)  
**CAUTIOUS** (ex-Prudent, Aug., 1940) **TRYPHON** (ex-Stormking, Nov., 1942)  
**EARNER** (ex-Ernest, July, 1943)  
Displacement : 700 tons (1,055 tons full load)  
Dimensions : 157 x 45 x — feet  
Machinery : Triple expansion. I.H.P. : 1,350 = 12 kts.  
Boiler : 1 cylindrical  
Oil fuel : 262 tons  
Complement : 31

Notes.—All built by Cochrane & Sons, Ltd. Launch dates above. Hengist Pendant No. A 110

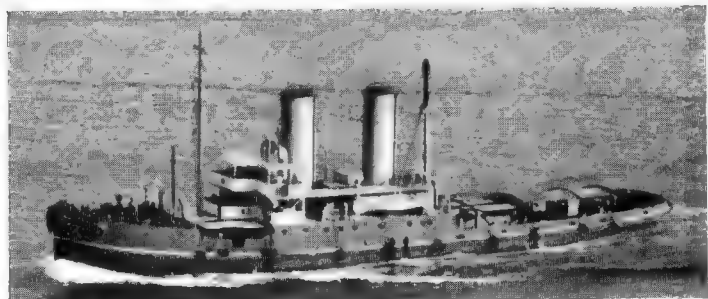
"Nimble" Class.

**CAPABLE** (Hall, Russell, Nov. 22, 1945) **EXPERT** (Fleming & Ferguson, 1944)  
**CAREFUL** (A. Hall & Co., Oct. 23, 1945) **NIMBLE** (Fleming & Ferguson, Dec 4 1911)  
Displacement : 890 tons (1,190 tons full load)  
Dimensions : 165 (pp.), 175 (o.a.) x 35½ x 13½ feet  
Machinery : Triple expansion. 2 shafts. I.H.P. : 3,500 = 16 kts  
Boilers : 2, of 3-drum type  
Oil fuel : 300 tons  
Note.—Capable was fitted experimentally with reversible pitch propellers.

"Brigand" Class.

**BRIGAND** (July 8, 1937) **MARAUDER** (Nov. 9, 1938)  
**BRITON** (ex-Bandit, Feb. 15, 1938) **FREEBOOTER** (Nov. 29, 1940)  
Displacement : 840 tons (1,190 tons full load)  
Dimensions : 165 (pp.), 174 (o.a.) x 32 x 10½ feet  
Guns : 1—3 inch AA., 1—20 mm. AA., 2 Lewis  
Machinery : Triple expansion. 2 shafts. Designed H.P. : 3,000 = 15.5 kts.  
Boilers : 2, of 3-drum type  
Oil fuel : 390 tons  
Complement : 43  
Notes.—Built by Fleming & Ferguson, Paisley, under 1936, 1937, 1938 Estimates. Fitted for salvage work, and have towing winches for work with battle practice targets.

"Rollicker" Class.



RESPOND. 1951, A. & J. Pavia.  
**RESPOND** (Ayrshire D.Y. Co.) **ROLICKER** (Ferguson Bros.)  
**RETORT** (Day, Summers & Co.) **ROYSTERER** (Thornycroft)

Displacement : 1,400 tons (full load)  
Dimensions : 175 x 34 x 17 (max.) feet  
Machinery : 2 shafts. I.H.P. : 2,400 = 14 kts.  
Complement : 24  
Notes.—All launched 1918-19. Builders above. All on Harbour Service. Retort, no Fx deck  
**EMPIRE DEMON** **EMPIRE IMP** **EMPIRE RITA**  
**EMPIRE EDWARD** **EMPIRE NETTA** **EMPIRE ROSA**  
**EMPIRE FRED** **EMPIRE PLANE** **EMPIRE ZONA**

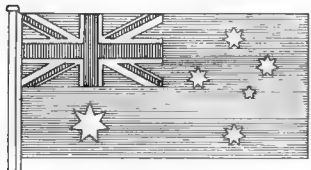
Note.—Not all of same type.

# ROYAL AUSTRALIAN NAVY

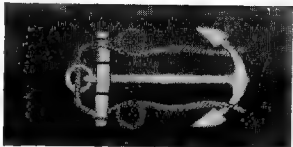
## Flags.



GOVERNOR-GENERAL.



JACK  
(AUSTRALIAN BLUE ENSIGN)



NAVAL BOARD FLAG

Note.—White Ensign and Pendant flown as in H.M. Ships.

## Administration.

Governor-General : Field Marshal Sir William Slim, G.C.B., G.B.E., D.S.O., M.C.  
Minister of Defence : Hon. Sir Philip A. M. McBride, K.C.M.G., M.P.

## Australian Commonwealth Naval Board.

President : Minister for the Navy, The Hon. William McMahon, M.P.  
First Naval Member and Chief of Naval Staff : Vice-Admiral Sir John A. Collins, K.B.E., C.B., R.A.N.  
Second Naval Member and Chief of Naval Personnel : Commodore (First Class) H. J. Buchanan, C.B.E., D.S.O., A.D.C., R.A.N.  
Third Naval Member and Chief of Naval Construction : Rear-Admiral (E) Charles C. Clark, O.B.E., D.S.C., R.A.N.  
Fourth Naval Member and Commodore (Air) : Commodore D. McL. Russell, R.N.  
Secretary, Department of the Navy : Thomas J. Hawkins, Esq., B.A., LL.B.

Secretary to Naval Board : Frank G. Cummins, Esq.

Liaison Officer, London : Capt. (S) J. B. Foley, C.B.E., A.D.C., R.A.N.  
Head of the Australian Joint Service Staff, Washington : Rear-Admiral D. H. Harries, C.B.E., R.A.N.  
Naval Attaché, Washington : Captain G. C. O. Gatacre, D.S.C. & Bar, A.D.C., R.A.N.

## Uniforms.

Same as in Royal Navy (see Great Britain section, Page 1). Reserve Officers now wear the same kind of straight rank-designating stripes and curls on their cuffs and shoulder straps as officers of the permanent navy, but with the letter "R" inside the curl, instead of "Navy" stripes.

## H.M. Australian Fleet.

Flag Officer Commanding H. M. Australian Fleet : Rear-Admiral R. R. Dowling, C.B.E., D.S.O., R.A.N.

On Jan. 1, 1949 the Royal Australian Navy changed the title of His Majesty's Australian Squadron to His Majesty's Australian Fleet. On the death of King George VI and the accession of Queen Elizabeth II the title was altered to Her Majesty's Australian Fleet.

The Naval programme provides for the establishment of a strong and compact striking force. It will be capable of operating independently as a task force or in co-operation with Allied naval forces. It is intended that the R.A.N. shall have 2 aircraft carriers, 1 cruiser, 9 destroyers (including 3 "Daring" class ships), 8 fast frigates, 14 frigates, 28 ocean minesweepers and miscellaneous small vessels.

## Personnel.

1954 : 13,441 officers and ratings. The Women's Royal Australian Naval Service has been re-established. WRANS (total 1 Jan. 1954 : 251) are employed on clerical, communications, stores and other administrative duties.

## Navy Estimates.

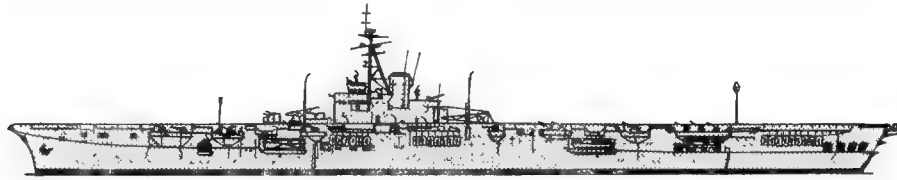
1949-50 : £18,500,000	1951-52 : £34,444,000	1953-54 : £45,770,000
1950-51 : £23,500,000	1952-53 : £47,290,000	

## New Construction.

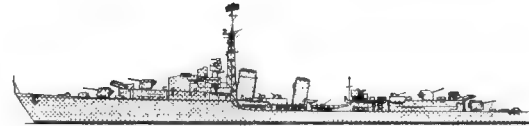
The naval construction programme in Australia includes 3 "Daring" class ships (2 of which have been launched), the building of 4 fast frigates, the conversion of 4 "Q" class destroyers into fast anti-submarine frigates (2 of which, *Quadrant* and *Queenborough* have been completed and are now in commission). 2 "Tribal" class destroyers have been modernised, and also a number of ocean minesweepers. In the United Kingdom an aircraft carrier which will be named *Melbourne* is being prepared for the R.A.N.

## Mercantile Marine.

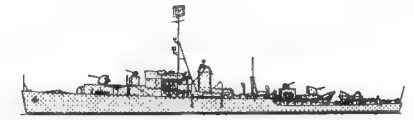
Lloyd's Register appendix, 1954 : 364 vessels of 578,536 tons gross.



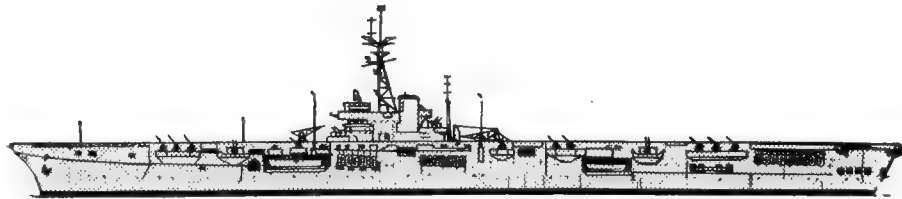
SYDNEY. \*



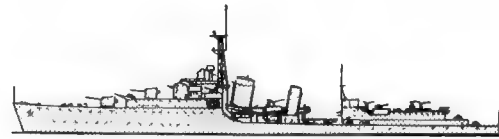
BATAAN.



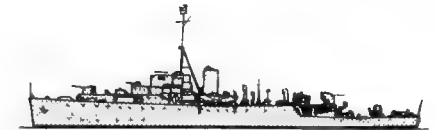
RIVER Class\*



VENGEANCE \*



ARUNTA, WARRAMUNGA.\*



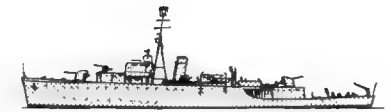
BARCOC\*



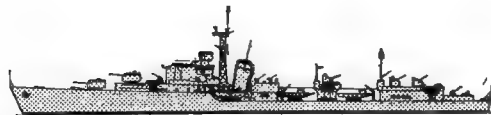
HOBART. (under reconstruction.)



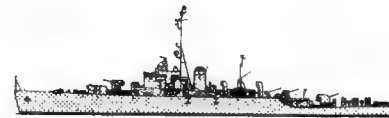
QUADRANT, QUEENBOROUGH\*



SWAN, WARREGO \*



ANZAC, TOBRUK \*



MURCHISON. (SHOALHAVEN with S.L. abaft funnel.)



BATHURST Class. \*

AUSTRALIA—Light Fleet Aircraft Carriers

Light Fleet Aircraft Carriers.

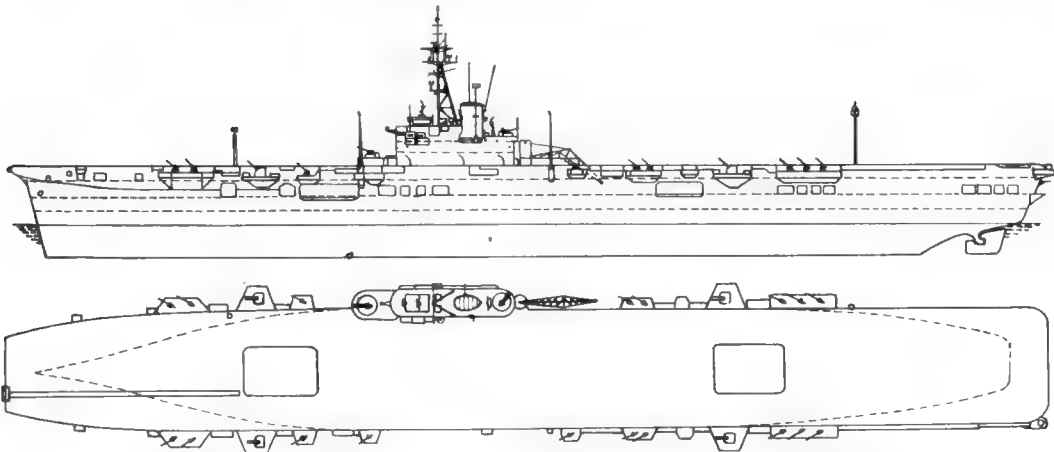


SYDNEY.

**MELBOURNE (ex-Majestic)**  
Displacement: 14,000 tons (standard), 19,550 tons (full load)  
Dimensions : Length : 630 (pp.), 690½ (flight deck), 695 (o.a.) feet. Melbourne 702 (o.a.).  
Beam: 80 feet. Draught: 25 feet. Width: 112½ feet (o.a.)  
Guns : 30—40 mm. AA. (Bofors), Melbourne 25—40 mm. AA.  
Aircraft: Seafury fighters, Firefly anti-submarine and reconnaissance squadrons  
Machinery : Parsons single reduction geared turbines. 2 shafts. S.H.P. : 42,000 = 24.5 kts. (designed)  
Boilers: 4 Admiralty 3-drum type  
Complement: 1,343 (war), 1,100 (peace)

1954, Skyfotos.

**SYDNEY (ex-Terrible)**



Notes.—*Sydney* handed over to R.A.N. Dec. 16, 1948, accepted for service Feb. 5, 1949, sailed from Devonport April 12, 1949, and arrived in Australia in May, 1949. *Melbourne*, which is undergoing reconstruction and modernisation in Great Britain, which will include the fitting of the angled deck and the steam catapult, will be transferred to R.A.N. on completion. Owing to modifications in the design her delivery will be delayed. After she has arrived in Australia the *Sydney* will go to Britain for reconversion on more modern lines. Both ships are to be modified to allow them to operate jet aircraft and new anti-submarine aircraft. They will be fitted with the new steam catapults.

**VENGEANCE**  
Displacement: 13,190 tons standard (18,040 tons full load)  
Dimensions : Length : 630 (p.p.), 693½ (o.a.) feet. Beam : 80 feet. Draught : 23½ (max.) feet  
Guns : 12—40 mm. AA., 32—20 mm. AA.

Notes.—Other particulars similar to *Sydney*. The British Government has lent Australia the *Vengeance* until the arrival of the Royal Australian's Navy second aircraft carrier *Melbourne* which is still under construction in Great Britain. The *Vengeance* was handed over to the R.A.N. at Devonport 13 Nov. 1952, left 7 Jan. 1953, and arrived in Australia in March 1953.



VENGEANCE

1953, A & J. Pavia.



VENGEANCE.

1952, courtesy T. Rayner, Esq.



SYDNEY.				1951, R.A.N., Official.		
Deck Letter	Name	Builders	Machinery	Laid down	Launched	Completed
K	Melbourne	Vickers-Armstrongs (Barrow)	Builders	15 Apr. 1943	28 Feb. 1945	Late 1955
K	Sydney	Royal Dockyard, Devonport	Parsons	19 Apr. 1943	30 Sep. 1944	5 Feb. 1949
Q	Vengeance	Swan, Hunter & Wigham Richardson, Ltd,		16 Nov. 1942	23 Feb. 1944	15 Jan. 1945



Light Cruiser (Training Ship).

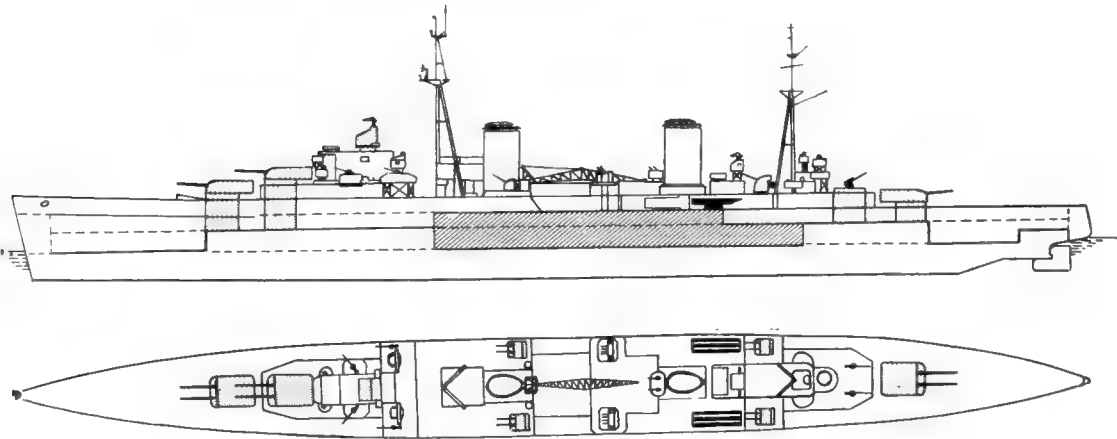


HOBART (ex-Apollo)

1951, R.A.N., Official

Builders : H.M. Dockyard, Devonport  
Engineers : Wm. Beardmore & Co., Ltd., Dalmuir, Glasgow.  
Laid down : 15 Aug., 1933  
Launched : 9 Oct., 1934  
Completed : Jan., 1936

Displacement: 7,105 tons (9,420 tons full load)  
Dimensions: Length: 530 (dp.), 555 (w.l.) feet. Beam: 56½ feet. Draught: 15½ (mean) feet  
Guns: 6—6 inch, 8—4 inch AA., 8—2 pdr. AA., 9—40 mm. AA., 2—20 mm. AA.  
Tubes: 8—21 inch (quadrupled)  
Armour: 1" turrets, 1" bridges, 2-3" side, 2" deck  
Machinery: 4 Parsons geared turbines. 4 shafts. S.H.P.: 72,000 = 32.5 kts.  
Boilers: 4 Admiralty 3-drum type  
Oil fuel: 1,725 tons  
Complement: 550

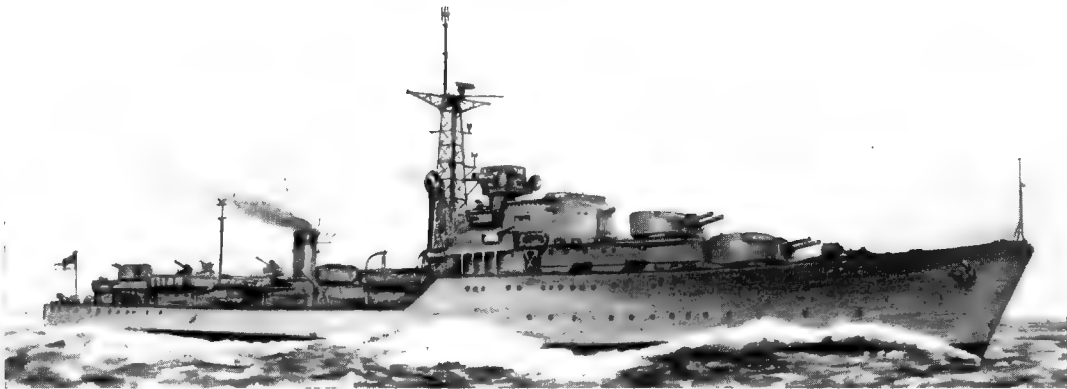


Notes.—Acquired from Great Britain in 1938. Though officially described as of "modified 'Leander' type", she differed entirely from the class in appearance. She was badly damaged aft by a torpedo off the New Hebrides in 1943. Officially stated modernisation begun, and substantial structural alterations carried out for completion as a training ship at Newcastle, New South Wales, State Dockyard by end of 1955. Second World War losses of this type : *Perth*, *Sydney*.

Heavy cruiser *Shropshire* was stripped 1954 and was available for disposal.  
Heavy cruiser *Australia* was paid off mid-1954 and will go to the shipbreakers.

All fitted as Leaders.

3 "Daring" Class.



(Artist's impression).

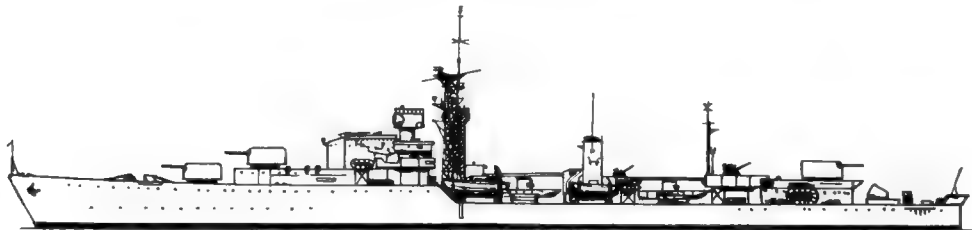
1950, C. W. E. Richardson.

VAMPIRE

VENDETTA

VOYAGER

Displacement: 2,610 tons (3,700 tons full load)  
Dimensions : 390 (o.a.) x 43 x 12½ feet  
Guns : 6—4.5 inch, 6—40 mm. AA.  
Tubes : 10—21 inch  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 54,000 = 34.75 kts. designed about 30.5 kts. sea speed)



Notes.—Largest destroyers ever built in Australia. All ordered in 1946. Design similar to that of "Daring" class, built in Great Britain ; but have been modified to suit Australian conditions. *Voyager*, first Australian all-welded steel ship, built in sections and assembled on the slipway from which she was launched. Four ships were originally projected, to be named after the R.A.N.'s famous "Scrap Iron Flotilla" of destroyers which won renown in the Mediterranean in the Second World War, but the *Waterhen* has been cancelled.

Name	Builders	Begun <sup>‡</sup>	Launched	Completed
<i>Vampire</i>	H.M.A. Naval Dockyard, Williamstown	4 July 1949		
<i>Vendetta</i>	Cockatoo Island Dockyard, Sydney	Mar. 1952	3 May 1954	
<i>Voyager</i>	Cockatoo Island Dockyard, Sydney	10 Oct. 1949	1 Mar. 1952	1956

<sup>‡</sup> Commenced Assembly

AUSTRALIA—Destroyers

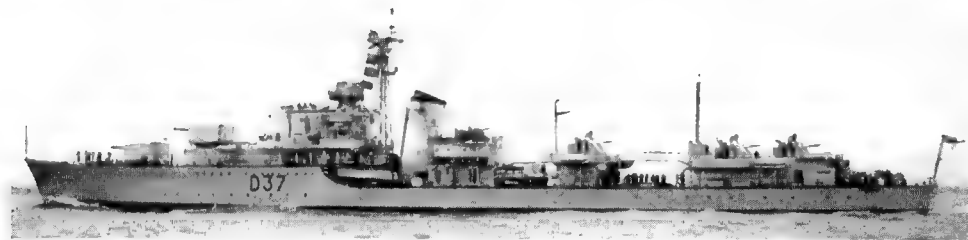
Fleet Destroyers.

2 "Battle" Class.



ANZAC.

1953, R.A.N., Official.



TOBRUK.

1952 R.A.N., Official.

ANZAC

TOBRUK

Displacement 2,325 tons (3,300 tons full load)  
Dimensions : 355 (pp.), 379 (o.a.) × 41 × 12½ (mean), 13½ (max.) feet  
Guns : 4—4.5 inch, 12—40 mm. AA.  
Tubes : 10—21 inch  
A/S Weapons : Squid  
Machinery : Parsons geared turbines, 2 shafts. S.H.P. : 50,000 = 35.75 kts. (designed), 31 kts. (sea speed)  
Boilers : 2 Admiralty 3-drum type  
Complement 290

General Notes.—Ordered 1945-46. Very similar to "Battle" class fleet destroyers in Royal Navy, but several alterations including secondary armament, sleeping accommodation for officers and men fore and aft, and improved mess layout and other amenities. Have modern radar fire control, close range Staag armament (new type of twin 40 mm. Bofors gun mounting) and latest anti-submarine weapons. *Tobruk* joined the fleet 16 Jan. 1951. Cost £2,470,000. *Anzac* commenced trials 20 Dec. 1950, and commissioned 14 Mar. 1951. Cost £2,500,000.

Gunnery Notes.—*Anzac* has the first "Battle" type 4.5 inch guns and mountings of completely Australian manufacture (weight of each twin mount approx. 50 tons.) Reported to be fully automatic, rate of fire 25 rounds per minute, accurate range of over ten miles, firing shell weighing 53 lb. The 4.5 inch guns for *Tobruk* were imported from Great Britain.

Appearance Notes.—Both *Anzac* and *Tobruk* have a clinker screen or funnel cowl, a recent addition (see photos) fitted to keep bridge clear of exhaust fumes and funnel gases in a following breeze.

Pendant No.	Name	Builders	Laid down	Launched	Completed
D 59	<i>Anzac</i>	Williamstown Naval Dockyard	23 Sept. 1946	20 Aug. 1948	22 Mar. 1951
D 37	<i>Tobruk</i>	Cockatoo Docks & Eng. Co., Pty., Ltd.		20 Dec. 1947	8 May 1950

Anti-Submarine Destroyers.

3 Improved "Tribal" Class.



ARUNTA (after modernisation)

1953, R.A.N., Official.



WARRAMUNGA.

1950, R.A.N., Official.

ARUNTA

BATAAN (ex-Kurnai)

WARRAMUNGA

Displacement: 1,970 tons (2,675 tons full load)  
Dimensions: 355½ (pp.), 377½ (o.a.) × 36½ × 9 feet (15½ feet max.)  
Guns : 4—4.7 inch, (*Bataan* 6—4.7 inch) 2—4 inch, 6—40 mm. AA., 4—2 pdr. AA., 4 M.G.  
Tubes : 4—21 inch  
A/S Weapons : *Arunta* and *Warramunga* squid aft in "Y" position. *Bataan* 2 D.C.T.  
Machinery : Parsons geared turbines. S.H.P. : 44,000 = 36.5 kts. (34 kts. sea speed)  
Boilers : 3 Admiralty 3-drum type  
Complement: 250

Note.—All built by Cockatoo Docks & Engineering Co. Pty., Ltd. *Arunta* underwent large scale refit and modernisation, guns being removed and deckhouse aft extended towards stern, re-armed with different pattern guns and A/S weapons and reclassified as anti-submarine destroyer. The conversion of *Warramunga* to an anti-submarine destroyer was completed in 1954. Modernisation of *Bataan* has been authorised, to be fitted with modern anti-submarine equipment.

Pendant No.	Name	Laid down	Launched	Completed
D 130	<i>Arunta</i>	15 Nov. 1939	30 Nov. 1940	3 Mar. 1942
D 191	<i>Bataan</i>	18 Feb. 1942	15 Jan. 1944	25 May 1945
D 123	<i>Warramunga</i>	10 Feb. 1940	7 Feb. 1942	23 Nov. 1942

QUALITY

Destroyer.

Displacement : 1,705 tons (2,425 tons full load)  
 Dimensions :  $358\frac{1}{2} \times 35\frac{1}{2} \times 9\frac{1}{2}$  (15½ max.) feet  
 Guns : 4—4.7 inch, 2—40 mm. AA., 4—2 pdr., 20 mm. AA.  
 Tubes : 8—21 inch  
 Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 40,000 = 36 kts.  
 Boilers : 2 Admiralty 3-drum type

Notes.—Above armament is that originally mounted as a destroyer. She is the only one of the class to remain unconverted into a fast anti-submarine frigate. See below.

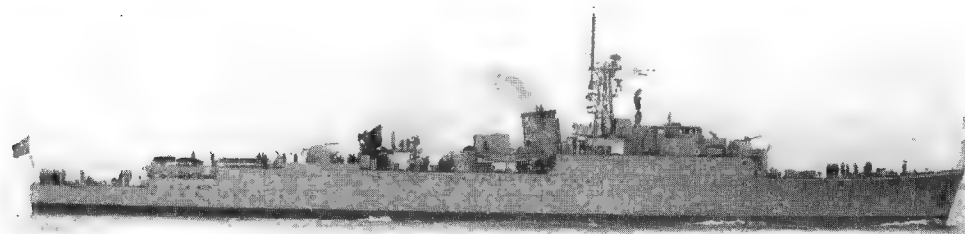
Fast Anti-Submarine Frigates.

4 New Construction.

Displacement: 2,000 tons (approx.)  
 Dimensions : 360 (pp.), 370 (o.a.)  $\times$  41  $\times$  — feet  
 Guns : 2—4.5 inch d.p., 2—40 mm. AA.  
 A/S weapons : Improved squid type  
 Speed : About 30 kts.

Notes.—Announced in Aug. 1950 that six new fast anti-submarine frigates were to be laid down, to cost £2,000,000 each, three to be built at Cockatoo Island Dockyard, Sydney, and three at the Naval Dockyard, Williamstown ; but only four are to be proceeded with. Officially stated that, although they are to be called anti-submarine frigates, they will actually be more like destroyers, in which the capacity for anti-submarine operations will be the principal factor in determining the provision of weapons and equipment

4 "Queenborough" Class (Fully Converted from Destroyers).



QUADRANT, (as converted into fast anti-submarine frigate).

1954, R.A.N., Official.

QUADRANT

QUEENBOROUGH

QUIBERON

QUICKMATCH

Displacement: 1,705 tons (2,425 tons full load)  
 Dimensions:  $358\frac{1}{2} \times 35\frac{1}{2} \times 9\frac{1}{2}$  (15½ max.) feet  
 Guns: 2—4 inch (twin-mount), 2—40 mm., Bofors, AA.  
 Tubes: 2—21 inch (fixed)  
 A/S Weapons: 2 ahead throwing improved squids (triple) in *Quadrant*, Limbo in *Queenborough*  
 Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 40,000 = 36 kts. (sea speed 32 kts.)  
 Boilers: 2 Admiralty 3-drum type  
 Complement: 220 (war)

Notes.—Formerly in the Royal Navy. Lent to the Royal Australian Navy in 1943 (*Quiberon*, *Quickmatch*) and 1945 (*Quadrant*, *Quality*, *Queenborough*). Transferred permanently June 1950 when it was announced they would all be converted to fast anti-submarine frigates similar to *Relentless* and *Rocket* in Great Britain section, the conversions being effected at Cockatoo Island and Williamstown dockyards, but only four have been or are being reconstructed, and *Quality* remains unconverted (see above). *Quadrant* commissioned 16 July 1953, *Queenborough* completed conversion and re-commissioned in October 1954 *Quiberon* and *Quickmatch* will complete conversion in 1955.

Pendant No.	Name	Builders	Laid down	Launched	Completed
F 11	<i>Quadrant</i>	R. & W. Hawthorn, Leslie & Co., Ltd., Hebburn-on-Tyne	24 Sep. 1940	28 Feb. 1942	26 Nov. 1942
D 262	<i>Quality</i>	Swan, Hunter & Wigham Richardson, Ltd., Wallsend-on-Tyne	10 Oct. 1940	6 Oct. 1941	7 Sep. 1942
F 270	<i>Queenborough</i>	Swan, Hunter & Wigham Richardson, Ltd., Wallsend-on-Tyne	6 Nov. 1940	16 Jan. 1942	10 Dec. 1942
F 281	<i>Quiberon</i>	J. Samuel White & Co., Ltd., Cowes, Isle of Wight	14 Oct. 1940	31 Jan. 1942	22 July 1942
F 292	<i>Quickmatch</i>	J. Samuel White & Co., Ltd., Cowes, Isle of Wight	6 Feb. 1941	11 Apr. 1942	30 Sep. 1942

Frigates.



MURCHISON.

1951, R.A.N., Official.



SHOALHAVEN.

1950, R.A.N., Official.

CONDAMINE

CULGOA (ex-Macquarie)

MURCHISON

SHOALHAVEN

Displacement: 1,544 tons (2,106 tons full load)  
 Dimensions: 283 (pp.), 301 (o.a.)  $\times$  36½  $\times$  12 (mean) feet  
 Guns: 4—4 inch, 3—40 mm. AA., 4—20 mm. AA.  
 A/S Weapons: 1 hedgehog, 4 D.C.T.  
 Machinery: Triple expansion, 2 shafts. I.H.P.: 5,500 = 19 kts.  
 Boilers: 2 Admiralty 3-drum type  
 Complement: 177

Note.—These 4 ships are an Australian version of the "Bay" class.

Pendant No.	Name	Builders	Launched
F 698	<i>Condamine</i>	N.S.W. Govt. Engineering & Shipbuilding Undertaking, Newcastle	20 Oct. 1943
F 408	<i>Culgoa</i>	Williamstown Naval Dockyard, Melbourne	22 Sept., 1945
F 442	<i>Murchison</i>	Evans, Deakin & Co., Ltd., Brisbane	31 Oct. 1944
F 535	<i>Shoalhaven</i>	Walkers, Ltd., Maryborough	14 Dec. 1944

AUSTRALIA—Frigates

Frigates.

7 "River" Class.



HAWKESBURY.

1954, R.A.N., Official.



MACQUARIE

1953, R.A.N., Official.

BARCOO  
BARWON  
BURDEKIN

DIAMANTINA  
GASCOYNE

HAWKESBURY  
MACQUARIE

Displacement: 1,420 tons (2,220 tons full load)  
Dimensions: 301½ × 36½ × 12 feet  
Guns: 2—4 inch, 2—40 mm. AA., 6 to 20 M.G.  
A/S Weapons: 2 squids (triple barrelled) in "B" position in Barcoo and Macquarie, 4 D.C.T.  
Machinery: Triple expansion. 2 shafts. I.H.P.: 5,500 = 20 kts.  
Boilers: 2 Admiralty 3-drum type  
Complement: 140

Notes.—All are of "River" design. Officially stated to have been equipped with the most modern anti-submarine devices. Barcoo is employed on Surveying service; forward 4-inch gun is in "A" position as in Macquarie. Lachlan, employed on Surveying duties is loaned to Royal New Zealand Navy for three years for hydrographic work and oceanographic research.

Pendant No.	Name	Builders	Launched
F 175	Barcoo	Cockatoo Docks	26 Aug. 1943
F 406	Barwon	Cockatoo Docks	3 Aug. 1944
F 376	Burdekin	Walkers, Maryborough	30 June 1943
F 377	Diamantina	Walkers, Maryborough	6 Apr. 1944
F 354	Gascoyne	Mort's Dock, Sydney	20 Feb. 1943
F 363	Hawkesbury	Mort's Dock, Sydney	24 July, 1943
F 532	Macquarie	Mort's Dock, Sydney	3 Mar. 1945

Frigates—continued.

2 "Swan" Class.



WARREGO.

1950, R.A.N., Official.

SWAN

WARREGO

Displacement: 1,060 tons (1,575 tons full load)  
Dimensions: 250 (pp.), 263 (w.l.), 266 (o.a.) × 36 × 7½ (mean) feet  
Guns: Swan: 4—4 inch, 1—40 mm. AA., 10 M.G.  
Warrego: 3—4 inch, 2—40 mm., 4—20 mm.  
Machinery: 2 sets Parsons geared turbines. S.H.P.: 2,000 = 16.5 kts.  
Boilers: 2 Admiralty 3-drum type  
Oil fuel: 275 tons  
Complement: 125

Notes.—Formerly classed as Sloops. Warrego (see photo) is employed on Surveying service but retains full armament for training purposes. War losses of this type: Parramatta, Yarra.

Pendant No.	Name	Builders	Laid down	Launched	Completed
F 74	Swan	Cockatoo Docks & Engineering Co., Pty., Ltd.	1 May 1935	28 Mar. 1936	10 Dec. 1936
A 312	Warrego	Cockatoo Docks & Engineering Co., Pty., Ltd.	15 May 1939	10 Feb. 1940	21 Aug. 1940

Submarines.

TACTICIAN

TELEMACHUS

THOROUGH

Notes.—On Loan from Royal Navy. For particulars see Great Britain section, page 53. Based at H.M.A.S. Penguin, Sydney, for anti-submarine training. Constitute the Fourth Submarine Squadron. All fitted with snort (Schnorkel breathing device).



Ocean Minesweepers.

28 "Bathurst" Class.



COWRA

1953, R.A.N., Official

Pendant No.		Launched	Pendant No.		Launched
8 Evans Deakin, Brisbane			5 Poole & Steel, Sydney		
M 34	ARARAT	20 Feb. 1943	M 186	COOTAMUNDRA	3 Dec. 1942
M 241	BUNBURY	16 May 1942	M 351	COWRA	27 May 1943
M 231	BUNDABERG	1 Dec. 1941	M 362	JUNEE	16 Nov. 1943
M 246	FREMANTLE	18 Aug. 1942	M 218	KAPUNDA	23 June 1942
M 326	GLENELG	25 Sep. 1942	M 204	KATOOMBA	16 Apr. 1941
M 238	GYMPIE	30 Jan. 1942			
M 361	PARKES	30 Oct. 1943			
M 205	TOWNSVILLE	13 May 1942	M 363	1 State Dockyard, Newcastle STRAHAN	12 July 1943
7 Mort's Dock, Sydney			3 Walkers, Maryborough		
M 05	COLAC	13 Aug. 1941	M 285	BOWEN	11 July 1942
M 232	DELORAINIE	26 July 1941	M 324	GLADSTONE	26 Nov. 1942
M 251	DUBBO	7 Mar. 1942	M 203	ROCKHAMPTON	26 June 1941
M 234	LATROBE	19 June 1942			
M 206	LITHGOW	21 Dec. 1940		4 Williamstown Dockyard	
M 207	MILDURA	15 May 1941	M 323	BENALLA	19 Dec. 1942
M 183	WAGGA	25 July 1942	M 244	CASTLEMAINE	3 Aug. 1942
			M 235	HORSHAM	23 May 1942
			M 248	SHEPPARTON	15 Aug. 1942

Displacement : 790 tons standard (1,025 tons full load)  
Dimensions: 186 (o.a.), 162 (pp.)  $\times$  31  $\times$  8½ (mean) feet  
Guns: 1—4 inch, 1—40 mm. AA., 6 M.G.  
Machinery : Triple expansion. 2 shafts. I.H.P. : 1,800 = 15.5 kts.  
Boilers: 2 Admiralty 3-drum small tube type

Notes.—Designed displacement was 650 tons (860 tons full load). Design is generally similar to "Bangor" type. Gladstone, Freemantle Wagga, Cootamundra and Junee are used for training Permanent Service, Reserve and National Service Training personnel. 60 ships of the "Bathurst" type were built in Australia, including 4 for the Indian Navy, and 20 on account of the Admiralty, which last, however, were manned and commissioned by the Royal Australian Navy. 8 "Admiralty" ships were sold to the Royal Netherlands Navy (4 of which were subsequently transferred to the Indonesian Navy) and 5 to the Turkish Navy after the war. Warranmbool was sunk by a mine off Queensland coast, 13 Sep. 1947. Echuca, Inverell, Kiama and Stawell were given to New Zealand 1952. Cowra and Mildura are no longer employed as training ships. War losses : Armidale, Geelong, Wallaroo.

Coastal Minesweepers.

4 New Construction.

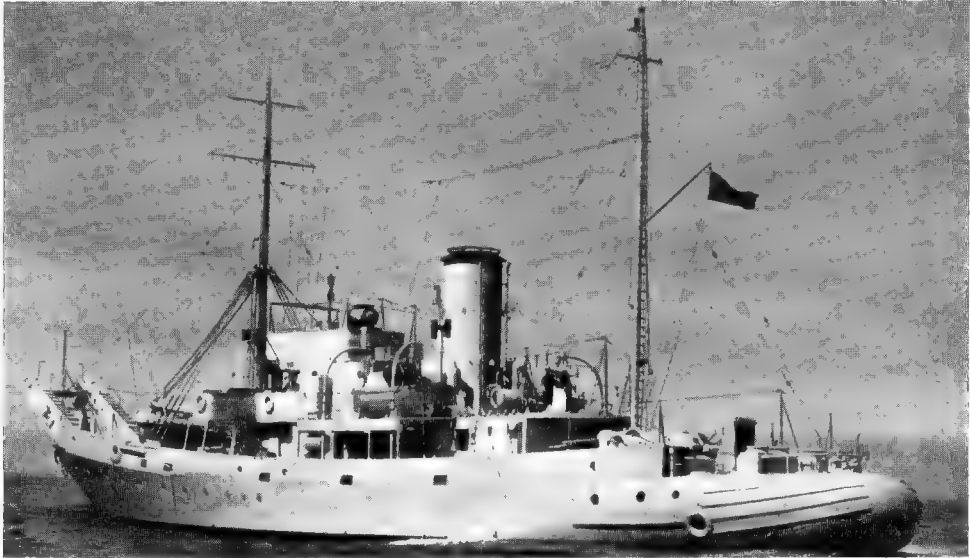
Notes.—The construction of four coastal minesweepers has been approved in private yards. Main engines and major items of equipment will be ordered in the United Kingdom through the Admiralty.

Boom Defence Vessels.

3 New Construction.

Notes.—Three boom working vessels are to be built. Hull of one will be constructed at the Naval Dockyard Willamstown, the other two in private yards.

3 "Kangaroo" Class.



KANGAROO.

1950, R.A.N., Official.

KANGAROO	KARANGI	KOALA
Displacement:	768 tons	
Dimensions:	150 (pp.), 164 (o.a.) $\times$ 32½ $\times$ 9½ (14 max.) feet	
Guns:	1—12 pdr.	
Machinery:	Triple expansion. I.H.P.: 850 = 11.5 kts.	
Boilers:	2	
Oil fuel:	140 tons	
Complement:	32	

Notes.—Boom defence, working and mooring vessels. Similar to the "Bar" type boom defence vessels in the Royal Navy

Pendant No.	Name	Laid down	Launched	Completed
P 80	Kangaroo		1939	
P 282	Karang	5 Feb. 1941	16 Aug. 1941	10 Dec. 1941
P 69	Koala		1939	

Depot Ship.

PLATYPUS (ex-Penguin, ex-Platypus)

Builders: John Brown & Co., Ltd., Clydebank.  
Launched: 28 Oct. 1916.

Displacement: 3,455 tons  
Dimensions: 310 (w.l.), 325 (o.a.)  $\times$  44  $\times$  15½ (max.) feet  
Guns: Few small  
Machinery: 2 sets triple expansion. 2 shafts. I.H.P.: 3,500 = 15.5 kts.  
Boilers: 4 cylindrical return-tube  
Coal: 450 tons  
Complement: 357

Notes.—Accommodation ship for vessels in reserve at Sydney. Formerly classified as a repair ship.

## AUSTRALIA—Seaward Defence Boats, Launches, etc.

### Seaward Defence Boats.

#### 4 New Construction.

Notes.—Announced Government has approved the construction in privately owned ship yards of four seaward defence boats. Propelling machinery and major equipment will be ordered from Great Britain.

### Seaward Defence Motor Launches.

SDML 1321      SDML 1324      SDML 1325      SDML 1327

Displacement : 46 tons (54 tons full load)  
Dimensions : 72 (o.a.) × 15½ × 5½ feet  
Guns : 1—3 pdr., 1—20 mm. AA.  
Machinery : Diesel. 2 shafts. B.H.P. : 320 = 12 kts.  
Complement : 14

Notes.—Originally known as Harbour Defence Motor Launches (HDML). SDML 1322 was officially stricken off 1953.

Note.—Tank Landing Ships *Labuan*, *Lae* and *Tarakan* were for disposal 1953-54.

### Air/Sea Rescue Launches.



AIR MERCY.

1951, R.A.N.

AIR CHIEF      AIR MASTER      AIR MERCY      AIR SPEED      AIR TRAIL

Length: 63 feet  
Speed: 30 kts.  
Radius: 200 miles

Notes.—The launches of the R.A.N. Search and Rescue Unit (A.S.R.C. Series) at Jarvis Bay are fitted with wireless and scientific equipment.

### General Purpose Vessels.



TALLAROOK.

1950, R.A.N., Official.



GPV 963.

Added 1949.

GPV 948	GPV 953	GPV 957	GPV 961	GPV 965
GPV 949	GPV 954	GPV 958	GPV 962	BROLGA
GPV 951	GPV 955	GPV 959	GPV 963	JABIRU
GPV 952	GPV 956	GPV 960	GPV 964	TALLAROOK

Length: 75 feet  
Machinery: Diesel  
Speed: 10 kts.

Notes.—Wooden General Purpose Vessels of M.F.V. type. Used for surveying, minesweeping and Fleet tender duties. GPV 963 was fitted for magnetic minesweeping. *Jabiru* and *Tallarook* employed as survey tenders for surveying shallow waters etc. Complement 8. Four of these vessels were loaned to the Royal Navy in 1951 for general duties in the Malayan area.

### Fleet Oiler.

Displacement : 15,000 tons (26,000 tons full load)  
Dimensions: 550 (pp.), 533 (o.a.) × 71 × 30 (max.) feet

Notes.—Australian Navy Minister announced on 19th Sep. 1951 that the Government had decided to buy a tanker for the R.A.N. at a cost of more than £A2,500,000. Ordered through British Admiralty. It is expected she will join Australian Fleet in 1955. See British section, page 76.

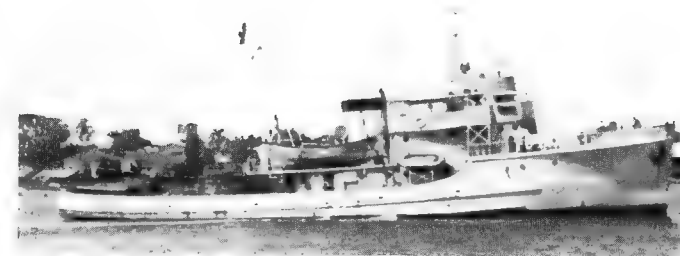
### Armament Store Carrier.

WOOMERA

Measurement: 300 tons gross  
Speed: 8 kts.

Note.—Armament Store Carrier.

### Fleet Tugs.



RESERVE.

Added 1949, courtesy K. F. Caldwell, Esq.

RESERVE

SPRIGHTLY

Displacement: 570 tons (800 tons full load)  
Dimensions: 143 × 33 × 13½ feet  
Guns: 1—3 inch AA., 2—20 mm.  
Machinery: Two Diesels and two electric motors. Engines fully controllable from bridge. B.H.P. : 1,875 = 14 kts.  
Oil fuel: 186 tons  
Complement: 34

Notes.—Reserve commissioned Dec. 10, 1942, with Australian crew under Lend-Lease and flew Australian Red Ensign for 12 months under control of Commonwealth Salvage Board, after which transferred to R.A.N. Salvage Board tug *Tancred* is sister ship.

Name	Builders	Laid down	Launched	Completed
Reserve	Levingstone S.B. Co.	18 May, 1942	18 July, 1942	12 Oct., 1942
Sprightly	Orange, Texas, U.S.A.	6 June, 1942	7 Aug., 1942	23 Nov., 1942

D.T. 931

D.T. 932

D.T. 933

Displacement: 250 tons  
Dimensions: 98½ (o.a.) × 21½ × 8 feet  
Machinery: Diesel. 1 shaft. B.H.P. : 510 = 9½ kts.

Notes.—First two built by Mort's Dock, Sydney, 933 by Poole & Steele Pty. Ltd., Sydney. Launched Feb. 2, June 25, and May 3, 1946, respectively.

# ROYAL CANADIAN NAVY

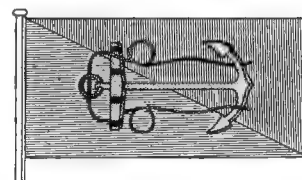
## Flags.



GOVERNOR-GENERAL.



JACK,  
CANADIAN BLUE ENSIGN.



NAVAL BOARD FLAG.

Ships of the Royal Canadian Navy wear the White Ensign, and have red maple leaves on (after) funnel. Mercantile flag is similar to Blue Ensign, with red instead of blue background.

## Administration.

*Governor-General* : His Excellency the Right Honourable Vincent Massey, P.C., C.H.

*Minister of National Defence* : The Hon. Brooke Claxton, Q.C.

*Deputy Minister of National Defence* : Mr. C. M. Drury, C.B.E., D.S.O., E.D.

## Naval Board.

*Chief of the Naval Staff* : Vice-Admiral E. Rollo Mainguy, O.B.E., C.D., R.C.N.

*Vice-Chief of Naval Staff* : Rear-Admiral W. B. Creery, C.B.E., C.D., R.C.N.

*Chief of Naval Personnel* : Rear-Admiral H. F. Pullen, O.B.E., C.D., R.C.N.

*Chief of Naval Technical Services* : Rear-Admiral (E) J. G. Knowlton, O.B.E., C.D., R.C.N.

*Assistant Chief of Naval Staff (Air)* : Commodore W. L. M. Brown, D.S.O., O.B.E., D.S.C., R.N.

*Assistant Chief of Naval Staff (Warfare)* : Commodore H. N. Lay, O.B.E., C.D., R.C.N.

*Secretary to the Naval Board* : Captain (S) C. V. Laws, C.D., R.C.N.

*Senior Canadian Naval Liaison Officer, London* : Captain J. V. Brock, D.S.O., D.S.C., R.C.N.

## Uniforms.

Same as In Royal Navy (see Great Britain section, Page 1) up to the rank of Vice-Admiral.

## Ranks.

Similar to those in Royal Navy, except that *Commodore* is a substantive and not a temporary rank.

## New Construction.

The Canadian Government has awarded contracts for building 81 warships and auxiliary vessels costing \$306,000,000. They include 14 anti-submarine frigates (rated as destroyer escorts), 14 coastal mine-sweepers, 5 gate vessels, 1 Arctic patrol vessel, 1 loop layer, and 46 auxiliary vessels.

## Personnel.

1st January, 1954 : *Royal Canadian Navy*, 16,505 officers and men (authorised strength 17,326).

*Royal Canadian Navy (Reserve)*, 6,296 officers and men (authorised strength 7,500).

## Navy Estimates.

1949-50 : \$32,000,000

1950-51 : \$33,000,000

1951-52 : \$277,000,000

1952-53 : \$294,000,000

1953-54 : \$332,356,000

## Ship Classification.

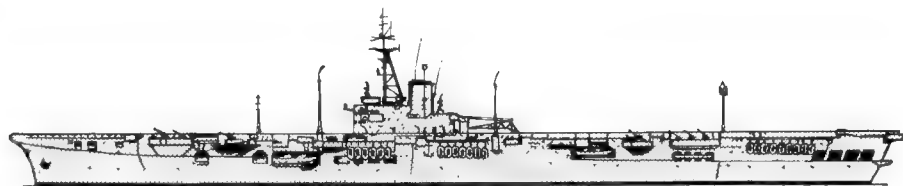
The Royal Canadian Navy has adopted a Type Designator and Hull Number Assignment List basically similar to that used in the United States Navy, as follows :

Light Fleet Aircraft Carrier	RML	Coastal Escort	FSE
Light Cruiser	CLB	Coastal Minesweeper	MCB
Escort Destroyer	DDE	Arctic Patrol Vessel	AW
Frigate	FFE	Gate Vessel	YMG

## Mercantile Marine.

Lloyd's Register appendix, 1954 : Sea : 847 vessels of 884,441 tons gross.

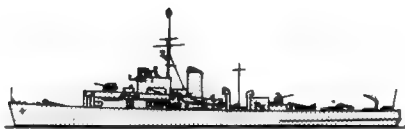
Great Lakes : 362 vessels of 82,405 tons gross.



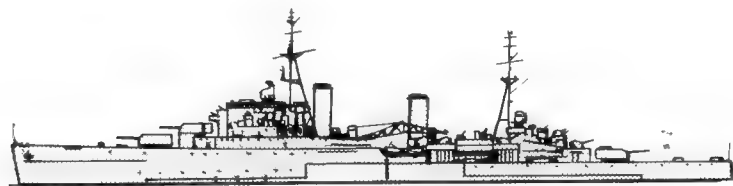
MAGNIFICENT.



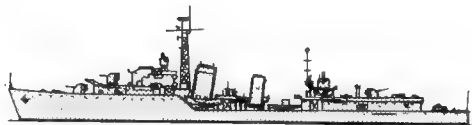
HAIDA, HURON, IROQUOIS, MICMAC.



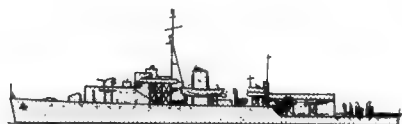
"RIVER" Class as reconstructed.



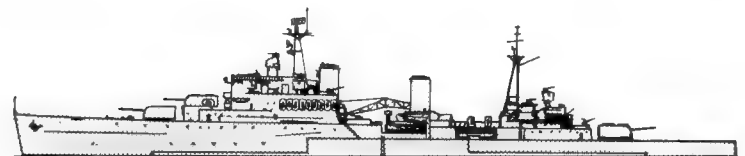
ONTARIO.



NOOTKA.



"RIVER" Class.



QUEBEC.



CRESCENT.



NEW LISKEARD Class.



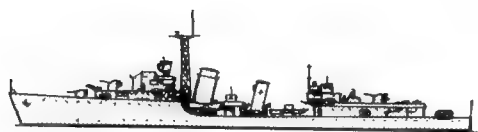
ATHABASKAN



SIOUX.



BLAIRMORE Class.



CAYUGA



ALGONQUIN.



BROCKVILLE Class.



Light Fleet Aircraft Carriers (RML).



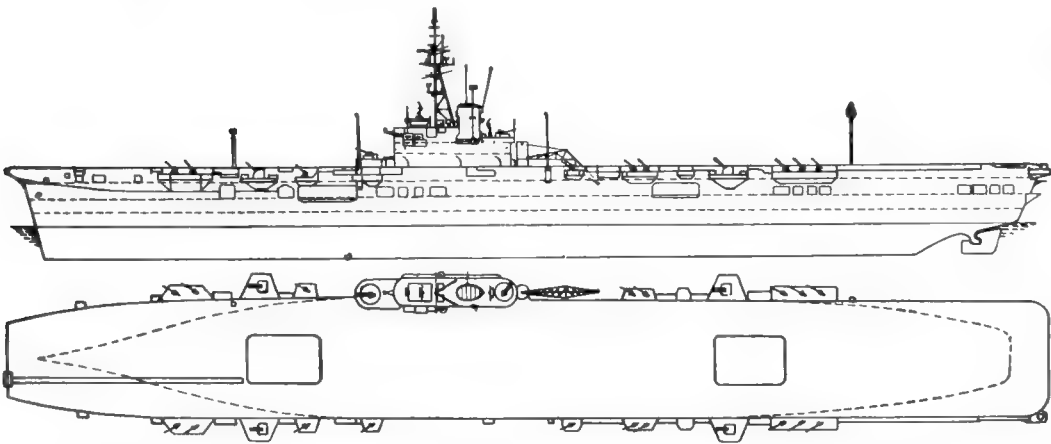
MAGNIFICENT.

1954, Wright & Logan.

BONAVENTURE (ex-Powerful)

MAGNIFICENT

Displacement: 14,000 tons (19,550 tons full load)  
Dimensions: Length: 630 (pp.), 695 (o.a.) feet. Beam: 80 feet. Width: 112½ feet. Draught: 25 feet  
Guns: 4—3 pdr., 30—40 mm. AA. (Bofors)  
Aircraft: 34 (capacity)  
Machinery: Parsons single-reduction geared turbines. 2 shafts. S.H.P.: 42,000 = 24.5 kts. (designed).  
Boilers: 4 Admiralty 3-drum type. Steam pressure at engines: 350 lb./sq. in.  
Complement: 1,350 (war)



Notes.—*Magnificent* is on loan from the Royal Navy. For widths of flight deck and other particulars see *Hercules* class, Great Britain section, page 16. Air recognition number 21 painted on flight deck. Type Designator and Hull No.: RML 21. Redesignated RML instead of CVL in 1954.

Arrangements were made in 1952 for the purchase by Canada of a suspended sister ship, *Powerful* (see photo, right) from Great Britain for completion to replace the *Magnificent* which will be retained in service by the Royal Canadian Navy in the meantime. The *Powerful*, under construction by Harland & Wolff, Ltd., Belfast, has been redesigned to handle jet aircraft, but will not be ready for service until 1955-56, as plans have been revised to provide for a completely modern aircraft carrier: the modification includes the strengthening of the flight deck and elevators and improvements in deck arrestor gear, and the new British steam catapult, capable of launching jet and heavy aircraft of types will be fitted. The *Powerful* was suspended in May 1946, but construction was resumed in July 1952, and she has been renamed *Bonaventure*. She is to have the new angled deck.



MAGNIFICENT.

Added 1954, Wright & Logan.



MAGNIFICENT.

1952, A. & J. Pavia



BONAVENTURE

1951 C. Parsons, Esq.

Name	Builders	Laid down	Launched	Completed
Bonaventure	Harland & Wolff, Ltd., Belfast.	27 Nov. 1943	27 Feb., 1945	7 Apr., 1948
Magnificent		29 July 1943	16 Nov., 1944	

## Light Cruiser (CLB).



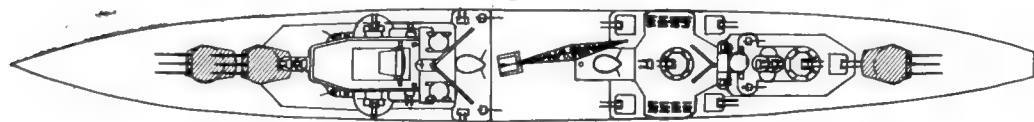
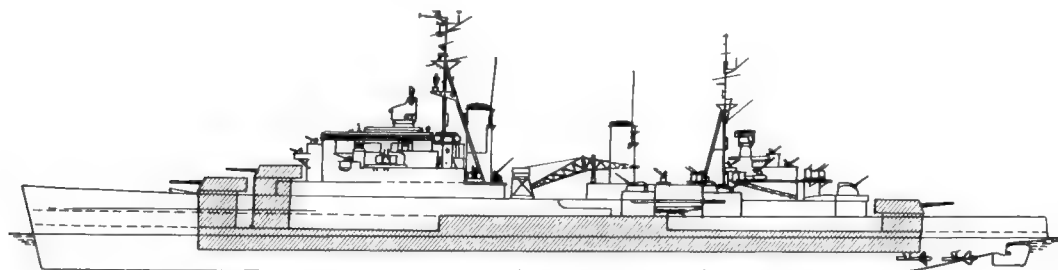
ONTARIO.

1954, Wright & Logan.

### ONTARIO (ex-Minotaur)

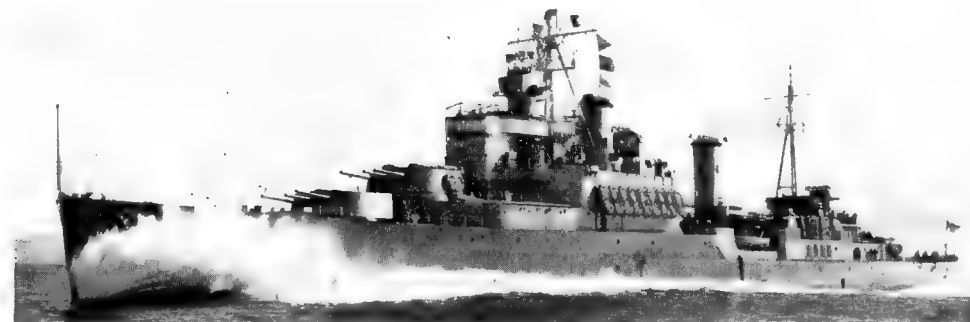
Builders: Harland & Wolff, Ltd., Belfast  
Laid down: 20 Nov., 1941  
Launched: 29 July, 1943  
Completed: 25 May, 1945

Displacement: 8,700 tons (11,480 tons full load)  
Dimensions: Length: 555½ (o.a.) feet. Beam: 63 feet. Draught: 16½ (mean), 21½ (max.) feet  
Guns: 9—6 inch, 10—4 inch, 23—40 mm. A.A.  
Tubes: 6—21 inch  
Armour: 4½"—3" side  
Machinery: Parsons geared turbines. 4 shafts. S.H.P.: 72,500 = 31.5 kts.  
Boilers: 4 Admiralty 3-drum type  
Oil fuel: 1,850 tons  
Complement: 730



Notes.—Built for the Royal Navy, and presented to the Royal Canadian Navy by Great Britain on completion. Radar equipment is of more modern pattern than in Quebec. Refitted Feb. 1950. Employed as Training Cruiser on West Coast. Type Designator and Hull No.: CLB 32. Identification Mark: ON. Redesignated CLB instead of CL in 1954.

## Light Cruiser (CLB).



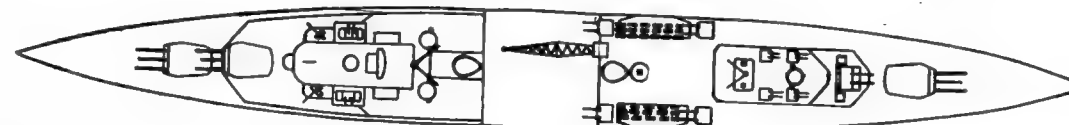
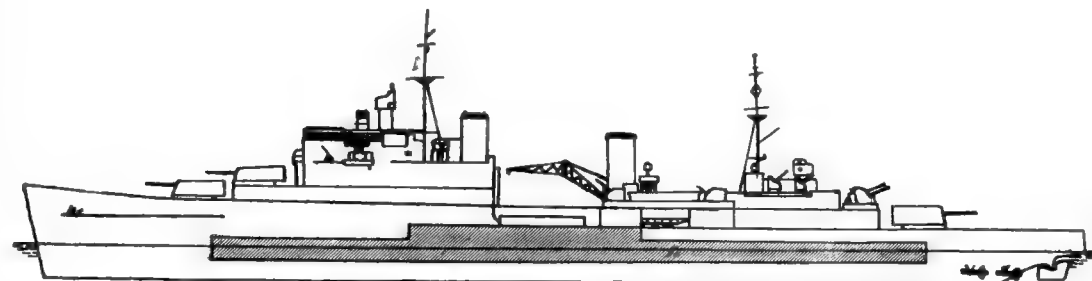
QUEBEC.

1952, R.C.N. Official.

### QUEBEC (ex-Uganda)

Builders: Vickers-Armstrongs, Ltd., Tyne  
Laid down: 20 July 1939  
Launched: 7 Aug. 1941  
Completed: 3 Jan. 1943

Displacement: 8,000 tons designed (10,840 tons full load)  
Dimensions: 549 (w.l.), 555½ (o.a.) feet. Beam: 61½ feet. Draught: 16½ (mean), 21½ (max) feet  
Guns: 9—6 inch, 8—4 inch, 18—40 mm. A.A.  
Tubes: 6—21 inch  
Armour: 4"—3" side  
Machinery: Parsons geared turbines. 4 shafts. S.H.P.: 72,000 = 31 kts.  
Boilers: 4 Admiralty 3-drum type  
Complement: 730

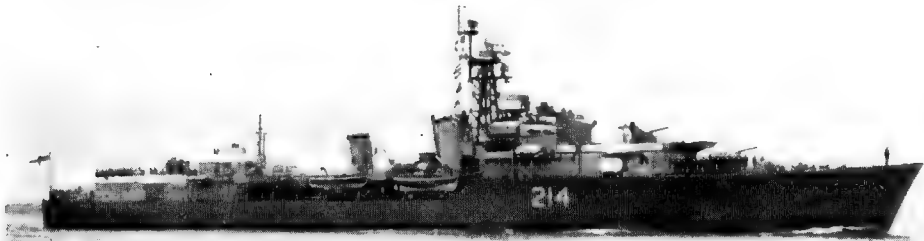


Note to Drawing.—The crane is amidships with the crane arm facing aft.

Notes.—Was presented to the Royal Canadian Navy by Great Britain on Oct. 21, 1944. Claims the distinction of having been the first ship in the Royal Canadian Navy to have sailed round Cape Horn. Winterized. Employed as Training Cruiser on East Coast. Type Designator and Hull No.: CLB 31. Identification Mark: UG. Redesignated CLB instead of CL in 1954.

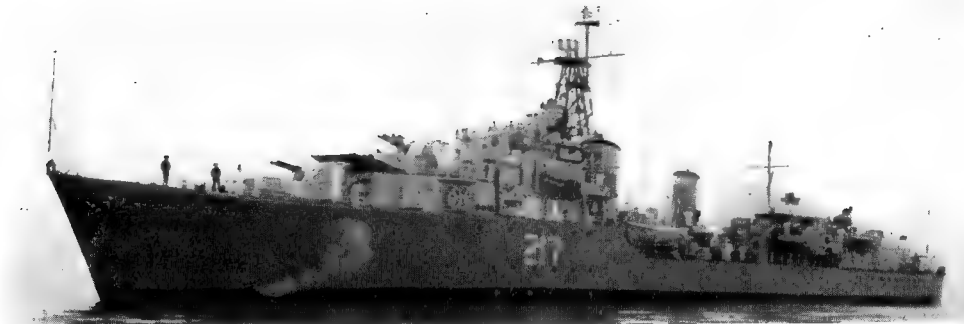
Destroyers (DDE).

7 Improved "Tribal" Class.



MICMAC.

1954, Wright & Logan.



IROQUOIS.

1954, R.C.N., Official



HURON.

1954, A. & J. Pavia.



HAIDA

1953, R.C.N., Official.

GROUP I (Built in Great Britain)  
3 by Vickers-Armstrongs, Ltd. (Tyne)

GROUP II (Built in Canada)  
4 by Halifax Shipyards, Ltd., Halifax

HAIDA HURON	IROQUOIS	ATHABASKAN CAYUGA	MICMAC NOOTKA
Displacement: 1,927 tons (2,745 tons full load)			
Dimensions: 355½ × 37½ × 9½ feet			
Guns: 4—4 inch, 2—3 inch, 4—40 mm. AA.			
Tubes: 4—21 inch			
A/S Weapons: 2 Squids			
Machinery: Parsons geared turbines, 2 shafts. S.H.P. : 44,000 = 36.5 kts. (34 kts. sea speed)			
Boilers: 3 Admiralty 3-drum type			
Complement: 240			

General Notes.—All these ships have been refitted and fully modernised. Cayuga, Haida, Huron, Iroquois and Micmac have all completed the conversion, and Athabaskan and Nootka will be completed in 1954. All ships of the class will have uniform armament (see above). A new short aluminium foremast fitted in all the ships of this class during the conversion. War loss: Athabaskan (built in Great Britain).

No.	Name	Builders	Laid down	Launched	Completed
DDE 219	Athabaskan	See above	29 Sept. 1941 15 July 1941 19 Sept. 1940	14 May 1946	20 Jan. 1948
DDE 218	Cayuga			28 July 1945	20 Oct. 1947
DDE 215	Haida			25 Aug. 1942	18 Sept. 1943
DDE 216	Huron			25 June 1942	28 July 1943
DDE 217	Iroquois			23 Sept. 1941	10 Dec. 1942
DDE 214	Micmac			18 Sept. 1943	12 Sep. 1945
DDE 213	Nootka			26 Apr. 1944	8 Oct. 1946



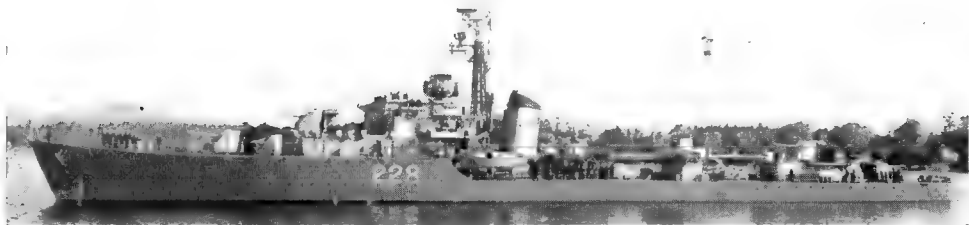
NOOTKA

1953, A. & J. Pavia.

CANADA—Destroyers

Destroyers (DDE).

2 “Crescent” Class.



CRUSADER (cinder screen on funnel). 1953, R.C.N., Official.

CRESCENT		CRUSADER	
Displacement:	1,710 tons (2,560 tons full load)		
Dimensions:	362½ × 35½ × 13½ (mean), 16 (max.) feet		
Guns:	2—4 inch, 2—3 inch, 4—40 mm. AA. Bofors.		
Tubes:	4—21 inch (quadrupled)		
A/S Weapons:	2 Squids		
Machinery:	Parsons geared turbines, 2 shafts. S.H.P.: 40,000 = 33 kts.		
Boilers:	2 Admiralty 3-drum type		
Complement:	165 (peace), 250 (war)		

Notes.—Lent to R.C.N. in 1945. Permanently transferred from Great Britain Sept. 1951. Destroyers converted to fast A/S escorts. *Crescent* is being converted similar to *Algonquin* and *Crusader* will be converted likewise at a later date.

No.	Name	Builders	Laid down	Launched	Completed
DDE 226	<i>Crescent</i>	} John Brown & Co., Ltd., Clydebank	16 Sept. 1943	20 July 1944	21 Sept. 1945
DDE 228	<i>Crusader</i>		15 Nov. 1943	5 Oct. 1944	26 Nov. 1945

2 “V” Type.



SIOUX. 1952, R.C.N., Official.

ALGONQUIN (ex-Valentine, ex-Kempfenfelt)		SIOUX (ex-Vixen)	
Displacement:	1,710 tons (2,530 tons full load)		
Dimensions:	362½ × 35½ × 10 feet		
Guns:	2—4 inch, 2—3 inch, 4—40 mm. AA.		
A/S Weapons:	2 Squids		
Machinery:	Parsons geared turbines, 2 shafts. S.H.P.: 40,000 = 34 kts.		
Boilers:	2 Admiralty 3-drum type		
Complement:	230		

Notes.—Transferred from Great Britain early 1944. Destroyers converted to fast A/S escorts. *Algonquin* has been completely converted similar to the British fast anti-submarine frigates of the “R” class.

No.	Name	Builders	Laid down	Launched	Completed
DDE 224	<i>Algonquin</i>	John Brown & Co., Ltd., Clydebank	8 Oct. 1942	2 Sept. 1943	28 Feb. 1944
DDE 225	<i>Sioux</i>	J. Samuel White & Co., Ltd., Cowes	31 Oct. 1942	14 Sept. 1943	5 Mar. 1944



ALGONQUIN. 1954, R.C.N., Official.

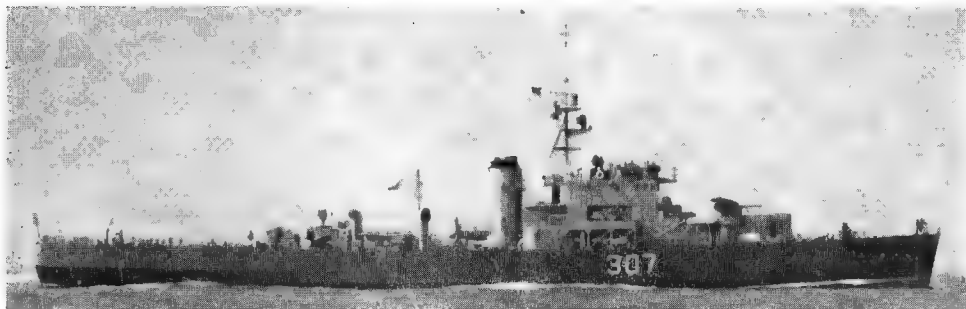


ALGONQUIN. 1954, R.C.N., Official.



Frigates (FFE)

21 Modernised Canadian “River” Class (A/S Conversion) + 3 Weatherships.



PRESTONIAN.

1954, R.C.N., Official.



SWANSEA,

1952, Wright & Logan.



LA HULLOISE.

1954, Skyfotos.



BEACON HILL.

1952, R.C.N., Official.

No.		Launched	No.		Launched
FFE 301	ANTIGONISH	10 Feb. 1944	FFE 310	OUTREMONT	3 July 1943
FFE 303	BEACON HILL	6 Nov. 1943	FFE 316	PENETANG (ex-Rouyn)	6 July 1944
FFE 314	BUCKINGHAM (ex-Royal Mount)	28 Apr. 1944	FFE 307	PRESTONIAN (ex-Beauharnois)	22 June 1944
FFE 317	CAP DE LA MADELEINE	13 May 1944	FFE 324	ST. CATHERINES	6 Dec. 1942
FFE 312	FORT ERIE (ex-La Tuque)	27 May 1944	FFE 323	ST. STEPHEN	6 Feb. 1944
FFE 308	INCH ARRAN	6 June 1944	FFE 309	ST. THERESE	16 Oct. 1943
FFE 318	JONQUIERE	28 Oct. 1943	FFE 311	STETTLE	10 Sep. 1943
FFE 305	LA HULLOISE	29 Oct. 1943	FFE 302	STONETOWN	28 Mar. 1944
FFE 321	LANARK	10 Dec. 1943	FFE 313	SUSSEXVALE (ex-Valdorian)	12 July 1944
FFE 322	LAUZON (ex-Glace Bay)	10 June 1944	FFE 306	SWANSEA	19 Dec. 1942
FFE 315	NEW GLASGOW	5 Mar. 1943	FFE 319	TORONTO (ex-Gifford)	18 Sep. 1943
FFE 304	NEW WATERFORD	3 July 1943	FFE 320	VICTORIAVILLE	23 June 1944

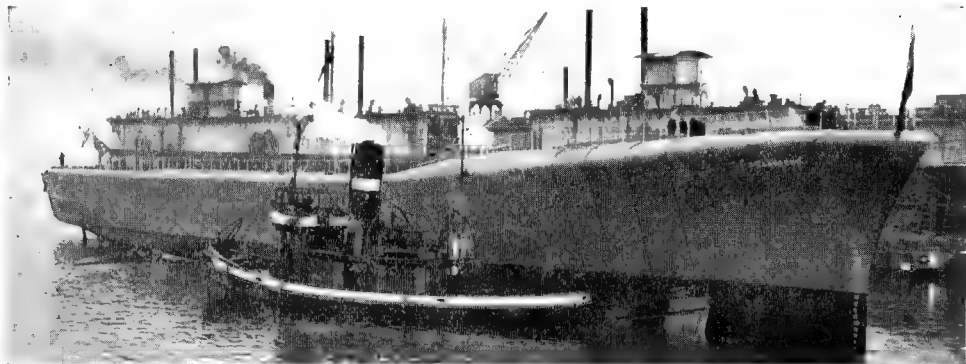
Displacement: 1,445 tons (2,360 tons full load)  
Dimensions: 301½ × 36½ × 12 feet  
Guns: 2—4 inch, 6—20 mm. AA., (except Stonetown, St. Catherines, St. Stephen, 1—12 pdr.)  
A/S Weapons: 2 Squids  
Machinery: Triple expansion. 2 shafts. I.H.P.: 5,500 = 20 kts.  
Boilers: 2 Admiralty 3-drum type  
Complement: 140

Notes.—Of similar design to British “River” class. Prestonian, Toronto, Lauzon, New Glasgow, Stettler, completed anti-submarine conversion 1953. Penetang, Buckingham in early 1954. All remainder except Stonetown, St. Catherines, and St. Stephen being converted similarly by 1955. All redesignated FFE (instead of PF) in 1953.

CANADA—Escorts

Destroyer Escorts (DDE). New Construction.

14 Anti-Submarine Frigate Type



ST. LAURENT.

1952, R.C.N., Official.

ASSINIBOINE  
CHAUDIERRE  
COLUMBIA  
FRASER

GATINEAU  
KOOTENAY  
MARGAREE  
OTTAWA

RESTIGOUCHE  
SAGUENAY  
ST. CROIX  
ST. LAURENT

SKEENA  
TERRA NOVA

Displacement : 2,000 tons (2,700 tons full load)  
Guns : 4—3 inch, 50 cal. AA. (U.S. pattern) in twin mountings ; 2—40 mm. AA. Bofors (single)  
A/S Weapons : 2 Ahead-projecting improved Squids (triple)  
Machinery : Geared Steam Turbines. 2 shafts. Speed 27 kts.  
Cost : \$8,000,000 each  
Complement : 270

**General Notes.**—Officially classed as major warships and as such are the first to be designed completely in Canada. These anti-submarine escort vessels or frigates of a high-speed type are being built primarily for the detection and destruction of modern fast submarines, and in evolving their design much assistance has been received from the Royal Navy and the United States Navy. In function the vessels will supersede the frigates and corvettes of the last war, and like the corvettes their design has been worked out so that in the event of emergency they could be produced rapidly and in quantity. In speed, manoeuvrability and weapons the ships will fulfil all the requirements of their class for modern sea warfare. Design provides for flush deck, low bridge, considerable use of aluminium instead of steel for the superstructure, fittings and furniture and compartmented hull. All were designated DDE instead of DE in 1954.

**Engineering Notes.**—Propelling machinery is of British design. Yarrow & Co., Scotstoun, Glasgow received an order from Canadian Vickers for the supply of a complete set of machinery for one of these frigates, the others being supplied with similar machinery manufactured in Canada. The main turbines and condensers are of English Electric design.

**Note.**—All details and photograph have been furnished by courtesy of the Canadian Department of National Defence in Ottawa.

No.	Name	Builders	Laid down	Launched
DDE 205	St. Laurent	Canadian Vickers, Ltd.	22 Nov. 1950	30 Nov. 1951
DDE 206	Saguenay	Halifax Shipyards	4 Apr. 1951	
DDE 207	Skeena	Burrard Dry Dock & Shipbuilding	1 June 1951	19 Aug. 1952
DDE 229	Ottawa	Canadian Vickers, Ltd.	8 June 1951	
DDE 230	Margaree	Halifax Shipyards	24 Sep. 1951	
DDE 233	Fraser	Burrard Dry Dock & Shipbuilding	11 Dec. 1951	19 Feb. 1953
DDE 234	Assiniboine	Marine Industries, Ltd.	30 May 1952	
DDE 235	Chaudierre	Halifax Shipyards	30 May 1953	
DDE 236	Gatineau	Davie Shipbuilding	30 Apr. 1953	
DDE 256	St. Croix	Marine Industries, Ltd.	Summer 1953	
DDE 257	Restigouche	Canadian Vickers, Ltd.	15 July 1953	
DDE 258	Kootenay	Burrard Dry Dock & Shipbuilding	21 Aug. 1952	
DDE 259	Terra Nova	Victoria Machinery Depot	14 Nov. 1952	
DDE 260	Columbia	Burrard Dry Dock & Shipbuilding	11 June 1953	

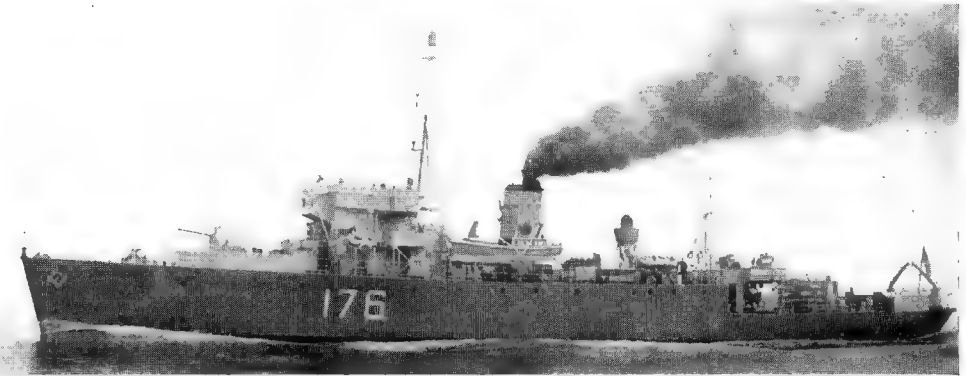
Coastal Escorts (FSE). Former Ocean Minesweepers.

9 Canadian "Algerine" Class.



PORTAGE.

1952 R.C.N. Official.



SAULT STE. MARIE.

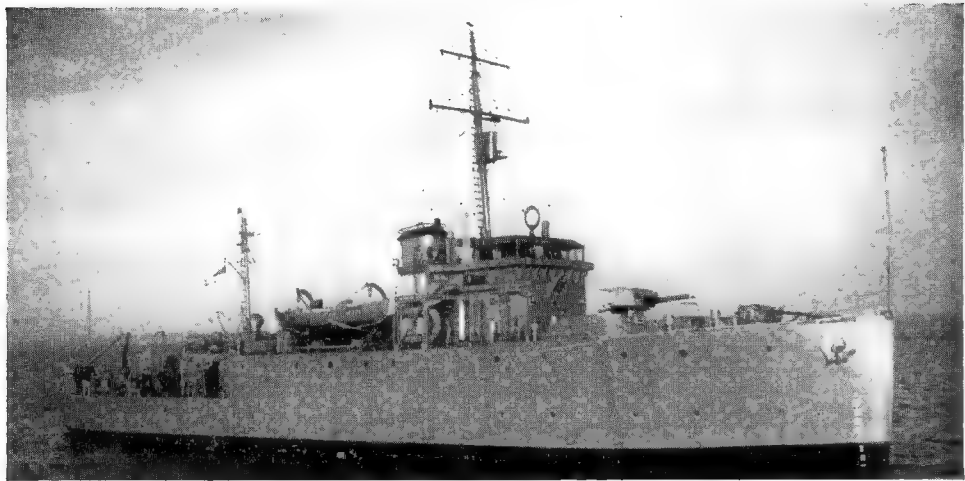
1952 R.C.N., Official.

No.	Launched	No.	Launched
FSE 170 FORT FRANCES	30 Oct. 1943	FSE 173 ROCKCLIFFE	19 Aug. 1943
FSE 171 KAPUSKASING	22 July 1943	FSE 176 SAULT STE. MARIE (ex-Soo)	5 Aug. 1942
FSE 168 NEW LISKEARD	14 Jan. 1944	FSE 172 WALLACEBURG	17 Dec. 1942
FSE 174 OSHAWA	6 Oct. 1943	FSE 177 WINNIPEG	19 Sep. 1942
FSE 169 PORTAGE	21 Nov. 1942		
Displacement:	1,040 tons (1,335 tons full load)		
Dimensions:	225 (pp.), 235½ (o.a.) × 35½ × 11 (max.) feet		
Guns :	1—4 inch, 1—40 mm.		
A/S Weapons :	1 hedgehog. 2 D.C. Throwers		
Machinery:	Triple expansion. 2 shafts. I.H.P.: 2,000 = 16.5 kts.		
Boilers:	2, of 3-drum type		
Complement:	85		

**Notes.**—Of same type as British "Algerine" class ocean minesweepers. All built by Port Arthur Shipbuilding Co., Port Arthur, Ontario. New Liskeard, formerly employed as seagoing training ship is now used for Bathy-thermographic duties at Halifax. Fort Francis and Kapuskasing on loan to Dept. of Mines and Technical Surveys. All redesignated FSE (instead of AM) in 1953.

Coastal Escorts (FSE). Former Fleet Minesweepers.

18 Canadian “Bangor” Class.



No.		Launched	No.		Launched
FSE 193	BLAIRMORE	14 May 1942	FSE 192	MAHONE	14 Nov. 1940
FSE 181	DRUMMONDVILLE	21 May 1941	FSE 194	MILLTOWN	5 Aug. 1942
FSE 195	FORT WILLIAM	30 Dec. 1941	FSE 189	MINAS	23 Jan. 1941
FSE 184	GANANOQUE	23 Apr. 1941	FSE 188	NIPIGON	1 Oct. 1940
FSE 198	GODERICH	14 May 1941	FSE 183	PORT HOPE	14 Dec. 1941
FSE 191	KENORA	5 Aug. 1942	FSE 196	RED DEER	5 Oct. 1941
FSE 182	KENTVILLE	17 Apr. 1942	FSE 190	SARNIA	21 Jan. 1942
FSE 186	MALPEQUE	5 Sep. 1940	FSE 185	SWIFT CURRENT	29 May 1941
FSE 197	MEDICINE HAT	25 June 1941	FSE 187	WESTMOUNT	15 Sep. 1941

Displacement : 672 tons (900 tons full load)  
Dimensions : 171½ (pp.), 180 (o.a.) × 28½ × 9½ feet  
Guns : 1—4 inch AA., 2—20 mm. AA., 4 M.G.  
Machinery : Triple expansion 2 shafts. I.H.P. : 2,400 = 16½ kts.  
Boilers : 2 Admiralty 3-drum type  
Complement : 70

Notes.—All the above ships were discarded after the Second World War but were reacquired by the Royal Canadian Navy in 1952 Former Fleet Minesweepers redesignated Coastal Escorts (FSE) in 1953.

Loop Layers.  
New Construction.

1 George T. Davie & Sons, Ltd., Lauzon, P.Q.  
Note.—Authorised under 1951 Programme.

1 Corvette Type.

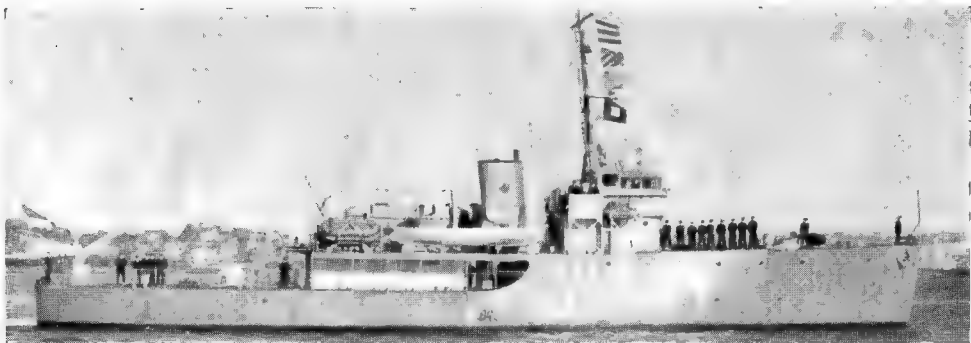
SACKVILLE

Launched:	15 May 1941
Displacement:	1,060 tons (1,350 tons full load)
Dimensions:	190 (pp.), 205 (o.a.) × 33 × 14½ feet
Guns:	1—4 inch, some smaller
Machinery:	Triple expansion. I.H.P.: 2,750 = 16 kts.
Boilers:	2 S.E.

Notes.—Ex- “Flower” class corvette. Built by St. John Dry Dock Co., St. John, N.B. Completed 30 Dec. 1941.

Coastal Escorts (FSE). Former Fleet Minesweepers.

3 Canadian “Bangor” Class (Diesel).



BROCKVILLE.

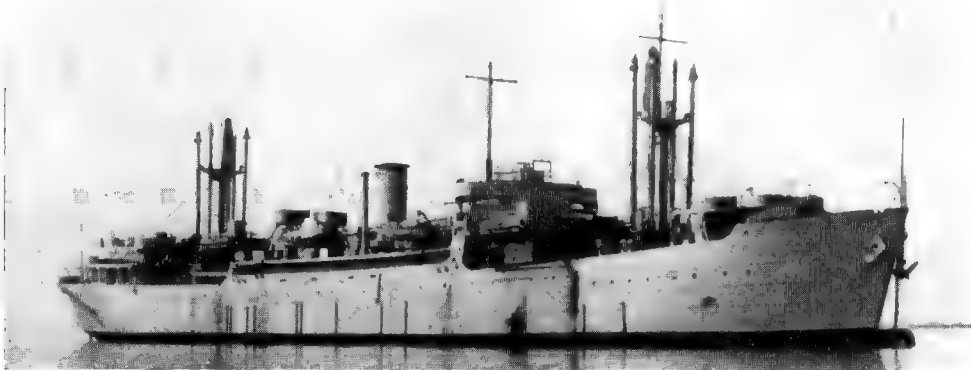
1954, R.C.N., Official.

No.		Launched	No.		Launched
FSE 178	BROCKVILLE (ex-R.C.M.P. Macleod, ex-H.M.C.S. Brockville)	20 June 1941	FSE 179	DIGBY	5 June 1942
			FSE 180	GRANBY	9 June 1941

Displacement: 590 tons (790 tons full load)  
Dimensions: 162 × 28 × 8½ feet  
Guns : 1—40 mm., 2—20 mm. AA.  
Machinery: Diesel. 2 shafts. B.H.P.: 2,000 = 16 kts.  
Complement: 60

Notes.—Former Fleet Minesweepers redesignated Coastal Escorts (FSE) in 1953.

Escort Maintenance Ships.



CAPE SCOTT

1951, P. A. Vicary.

CAPE BRETON (ex-Flamborough Head)

CAPE SCOTT (ex-Beachy Head, ex-Vulkaan, ex-Beachy Head)

Displacement:	8,580 tons
Dimensions:	439 × 62 × 29 feet
Guns:	16—20 mm. AA.
Machinery:	Geared turbines. S.H.P.: 6,000 = 17 kts.
Boilers:	2 Foster Wheeler

Notes.—Both built at Vancouver, B.C. Launched 1944. Cape Breton, which is employed as a training ship for Artificers served in Royal Navy as the escort maintenance ship Flamborough Head. Returned to Canada from the United Kingdom in 1951 and in turn acquired by the Royal Canadian Navy and renamed 1953. Beachy Head, served in the Royal Navy until 1947, when she was lent to the Royal Netherlands Navy. Returned to Royal Navy 1950. Acquired by R.C.N. 1952 and once more renamed 1953.

CANADA—Minesweepers, Motor Launches, Minelayer.

Motor Minesweepers (MCB)



CORDOVA 1953, R.C.N. Official.

MCB 158 CORDOVA (ex-YMS 420)

Builders : Harry C. Grebe, Chicago, Ill.

Displacement : 325 tons  
Dimensions : 136 × 24½ × 8 feet  
Machinery : Diesel, B.H.P. : 1,000 = 15 kts.  
Complement : 30

Notes.—Ex-U.S. Auxiliary Motor Minesweeper. Purchased and taken over by the Royal Canadian Navy 3rd Dec. 1951. Employed as tender to Vancouver Naval Reserve Division. Redesignated MCB instead of YMS in 1954.

2 "Llewellyn" Type.



LLEWELLYN. 1950, R.C.N., Official.

LLEWELLYN (AMC 141)

REVELSTOKE

Displacement : 255 tons (360 tons full load)  
Dimensions : 105 (pp.), 119 (o.a.) × 23 × 10½ (max.) feet  
Machinery : Diesel. B.H.P. : 500 = 10 kts.  
Complement : 20

Notes.—Wood. Similar to smaller MMS in Royal Navy. Llewellyn launched 12 Aug. 1942. Llewellyn and Revelstoke employed as tenders at St. John, N.B. and St. John's, Newfoundland. Lloyd George of this class was scrapped in 1952.

Coastal Minesweepers (MCB).

8 + 6 "Gaspe" Class.



GASPE. 1954, R.C.N., Official.

CHALEUR  
CHIGNECTO  
COMOX  
COWICHAN  
GASPE  
FORTUNE  
FUNDY

JAMES BAY  
MIRAMICHI  
QUINTE  
RESOLUTE  
THUNDER  
TRINITY  
UNGAVA

Displacement : 370 tons  
Dimensions : 140 (p.p.), 152 (o.a.) × 28 × 8½ feet  
Guns : 1—40 mm.  
Machinery : Diesels, 2 shafts. B.H.P. : 2,500 = 16 kts.  
Complement : 5 officers, 39 ratings

Notes.—Extensively built of aluminium, including frames and decks. Four ordered under 1950 Programme and ten under 1951 Programme. Named after Canadian straits and bays. Other names considered were Belle Isle, Conso, and Chantry. Designation changed from AMC to MCB in 1954.

No.	Name	Builders	Laid down	Launched
164	Chaleur	Marine Industries		
160	Chignecto	Geo. T. Davie		
146	Comox	Victoria Machinery	21 Mar. 1951	24 Apr. 1952
162	Cowichan	Yarrows		
143	Gaspe	Davie Shipbuilding	21 Mar. 1951	12 Nov. 1951
151	Fortune	Victoria Machinery	24 Apr. 1952	14 Apr. 1953
159	Fundy	Davie Shipbuilding		
152	James Bay	Yarrows	16 Aug. 1951	12 Mar. 1953
163	Miramichi	Victoria Machinery		
149	Quinte	Port Arthur	2 May 1952	8 Aug. 1953
154	Resolute	Kingston Shipyard	29 Aug. 1951	20 June 1953
161	Thunder	Port Arthur		
157	Trinity	Geo. T. Davie	31 Jan. 1952	31 July 1953
148	Ungava	Davie Shipbuilding	17 Dec. 1951	20 May 1953

Chignecto (156), Cowichan (147), Fundy (145), Miramichi (150), Chaleur (144), and Thunder (153), of the class were transferred to the French Navy in 1954. Six others of this class are being built for the R.C.N. to take the place of those transferred.

Seaward Defence Patrol Craft (PCS)

8 New Construction.

ARCTIC TERN    CORMORANT    KINGFISHER    MALLARD  
BLUE HERON    HERRING GULL    LOON    SANDPIPER

Motor Launches (PCS).



1950, R.C.N., Official.

PCS 704 COUGAR (ex-ML 104)

PCS 706 BEAVER (ex-ML 106)

PCS 711 MOOSE (ex-ML 111)

PCS 716 REINDEER (ex-ML 116)

PCS 724 ELK (ex-ML 124)

PCS 762 WOLF (ex-ML 062)

PCS 779 RACCOON (ex-ML 079)

Displacement : 65 tons  
Dimensions : 112 × 18½ × 4½ feet  
Guns : 1—20 mm., 2 M.G. and D.C.  
Machinery : 2 Hall-Scott Defender engines. H.P. : 1,260 = 19 kts.  
Complement : 18

Notes.—Of the Fairmile "B" type. Elk is in commission at Esquimalt. Remainder used as training ships on the Great Lakes. Named, and designation changed from PTC to PCS in 1954.

Controlled Minelayer.



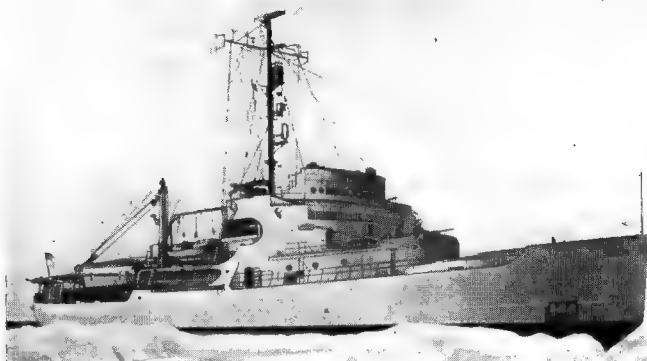
WHITETHROAT 1952, R.C.N., Official.

WHITETHROAT

Builders : Cook Walton & Gemmell, Ltd., Beverley, E. Yorks.  
Launched : 6 Sept. 1944  
Displacement : 580 tons (790 tons full load)  
Dimensions : 150 (pp.), 164 (o.a.) × 27½ × 12½ feet  
Guns : 1—4 inch AA., etc.  
Machinery : Triple expansion. I.H.P. : 850 = 12.5 kts.  
Boiler : 1 cylindrical



## Arctic Patrol Vessel (Icebreaker) (AGB).



Naval Artist's Impression.

1950, R.C.N., Official.

### LABRADOR (AGB 50)

Builders: Marine Industries Ltd., Sorel, Quebec  
Laid down: Nov. 1949  
Launched: 14 Dec. 1951  
Completed: 8 July 1954  
Displacement: 5,400 tons  
Dimensions: 269 × 63½ feet  
Guns: Several short-range weapons.  
Machinery: Diesel-electric. B.H.P.: 10,000 = 16 kts  
Complement: 173

Notes.—Ordered Feb. 1949. Canada's largest and most modern icebreaker. Steel sides about 2 in. thick, and heating tanks built into her. Another new feature is a flight deck built aft, which will accommodate a seaplane and provide a platform for a helicopter to land. Ship will also carry a landing craft strengthened to resist ice formations. Icebreakers C. D. Howe and D'Iberville are purely mercantile vessels under the administration and control of the Ministry of Transport.

## High Speed Launches (HSL).



HSL 232.

1952, R.C.N., Official.

### HSL 208

Displacement: 30 tons  
Dimensions: 70 × 20 × 4½ feet  
Machinery: 2 Packard engines. 2 shafts. B.H.P.: 2,700 = 40 kts.  
Complement: 10

### HSL 232

### HSL 233

Notes.—Built by Canadian Power Boat Co., Montreal, P.Q. Used for search and rescue work. These craft were taken over from the R.C.A.F. by R.C.N., 3 Jan. 1952.

## Patrol Vessels (AG.).



CEDARWOOD.

1950, R.C.N., Official.

### CEDARWOOD

Displacement: 566 tons  
Dimensions: 326 × 30 × 9½ feet  
Machinery: Diesel. B.H.P.: 600 = 11 kts.

### EHKOLI

Displacement: 154 tons  
Dimensions: 84½ × 20 × 9 feet  
Machinery: Diesel. Speed: 10 kts.

Note. Cedarwood is employed on Oceanographical Survey duties in the Esquimaux area.

### EHKOLI

## Gate Vessels (YMG).

### 5 "Porte" Class.



PORTE ST. JEAN.

1952, R.C.N., Official.

### PORTE DAUPHINE PORTE DE LA REINE

### PORTE QUEBEC

### PORTE SAINT-JEAN PORTE SAINT-LOUIS

Displacement: 465 tons  
Dimensions: 125½ × 28½ × 13 feet  
Machinery: Diesel. A/C Electric. 1 shaft. B.H.P.: 600 = 11 kts.  
Complement: 3 officers, 20 ratings

Notes.—Of trawler design. Multi-purpose vessels—gate vessels used for operating the gates in the A/S booms, fleet auxiliaries, anti-submarine netlayers for entrances to defended harbours. Capable of being fitted for minesweeping. Designation changed from YNG to YMG in 1954.

No.	Name	Builders	Laid down	Launched	Completed
186	Porte Dauphine	Pictou Foundry	16 May 1951	24 Apr. 1952	10 Dec. 1952
184	Porte de la Reine	Victoria Machinery	4 Mar. 1951	28 Dec. 1951	19 Sep. 1952
185	Porte Quebec	Burrard Dry Dock	15 Feb. 1951	28 Aug. 1951	7 Oct. 1952
180	Porte St. Jean	Geo. T. Davie	16 May 1950	21 Nov. 1950	4 June 1952
183	Porte St. Louis	Geo. T. Davie	21 Mar. 1951	22 July 1952	28 Aug. 1952

## Patrol Vessels, Auxiliaries—CANADA

## Supply Vessels (AKS).



EASTORE.

1952, R.C.N. Official.

### EASTORE

### LAYMORE

Measurement: 560 tons gross, 262 tons net.  
Dimensions: 176½ × 32 × 8 feet  
Machinery: General Motors Diesel. B.H.P.: 1,000 = 10-8 kts.

Notes.—Small supply vessels for coastal services. Classed as fleet auxiliaries.

## Oilers (AO).



DUNDALK.

1949, R.C.N., Official.

### DUNDALK

### DUNDURN

Displacement: 950 tons  
Dimensions: 178½ × 32½ × 13 feet  
Machinery: Diesel. B.H.P.: 700 = 10 kts.

Notes.—Small vessels designated tankers, and classed as fleet auxiliaries.

## A/S TT Vessels.

### EASTWOOD GREENWOOD

### LAKEWOOD OAKWOOD

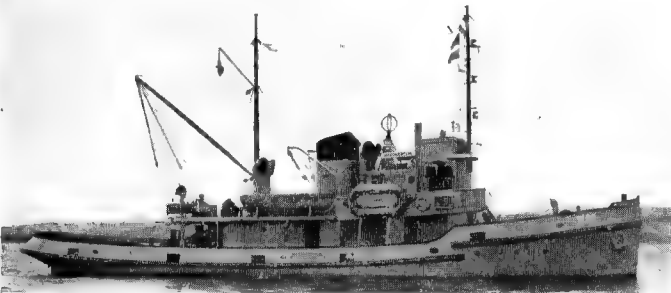
### WILDWOOD

Note.—Oakwood loaned to Esquimaux Department of Transport.

CANADA, CEYLON

Ocean Tugs (ATA).  
New Construction.  
2 "Modified Norton" Class.

Note.—Authorised under 1951 Programme. Builders, St. John Dry Dock Co.



HEATHERTON CLIFTON	HEATHERTON RIVERTON	1952, R.C.N., Official.
Displacement:	462 tons	
Dimensions:	104 (pp.), 111½ (o.a.) × 28 × 11 feet	
Machinery:	Dominion Sulzer Diesel.	B.H.P.: 1,000 = 11 kts.
Complement:	17	

Notes.—Clifton launched 31 July 1944. Beaverton, of this type, sunk by collision at Montreal in 1947.

Tugs.  
7 "Glen" Class.

GLENBROOK GLENDEVON	GLENDON GLEN DYNE	GLENEVIS GLENLIVIT II GLENSIDE
Dimensions:	80 × 18½ × 10 feet	
Machinery:	Diesel.	B.H.P.: 300 = 9 kts.

Note. Glenlivit II loaned to Halifax Department of Public Works.

10 "Ville" Class.

ADAMSVILLE BEAMSVILLE COLVILLE	ECKVILLE HAYSVILLE LAURENCEVILLE	LISTERVILLE MANNVILLE MERRICKVILLE PARKSVILLE
--------------------------------------	--	--

Note.—Majority employed on towing duties at Esquimalt and Halifax.

N.F.T. No. 1	N.F.T. No. 2	N.F.T. No. 3
--------------	--------------	--------------

Note.—Naval fire tugs.

Yachts.

GRILSE (ex-Dontoff). Yacht	TUNA (ex-Seerauber). Yacht
ORIOLE. Yacht	VERAINE Admiral's Barge

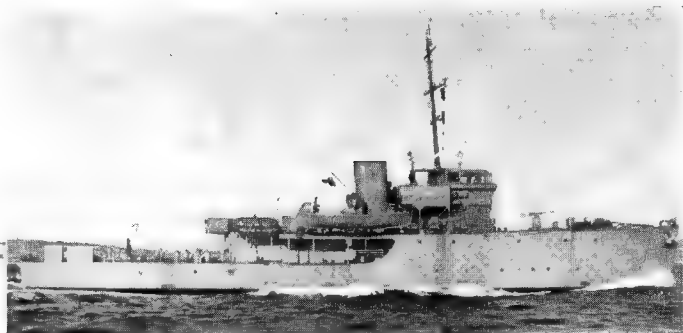
Notes.—All at Halifax. Grilse and Tuna in reserve.

Tenders.

Notes.—A number of devising tenders are maintained. A number of LCAs are in service or reserve.

ROYAL CANADIAN MOUNTED POLICE  
MARINE SECTION.

4 "Commissioner" Class.  
(Ex-Fleet Minesweepers).

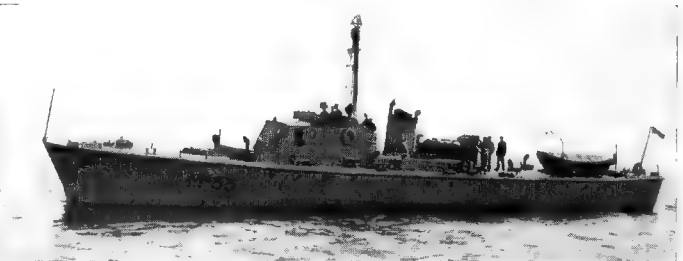


CYGNUS (ex-Melville) FRENCH (ex-Transcona)	IRVINE (ex-Noranda) MACBRIEN (ex-Trois Rivières)	1950, R.C.N., Official.
Displacement:	590 tons (790 tons full load)	
Dimensions:	162 × 28 × 8½ feet	
Machinery:	Diesel. 2 shafts.	B.H.P.: 2,000 = 16 kts

Notes.—All ex-minesweepers of Canadian "Bangor" type. Macleod (ex-Brockville), reverted to Royal Canadian Navy 1951. Fleet minesweepers of this type, Digby, to have been renamed Colonel White, and Granby, to have been renamed Perry, were never actually taken over and commissioned by the R.C.M.P. and have reverted to the R.C.N. (see earlier page). Herchmer (ex-Truro) and Starnes (ex-Lachine) were turned over to War Assets as surplus and disposed of.

Name	Launched	Name	Launched
Cygnus	7 June 1941	Irvine	30 June 1941
French	26 Apr. 1941	Macbrien	30 June 1941

4 "Fort" Class.  
(Fairmile "B" Type Motor Launches).

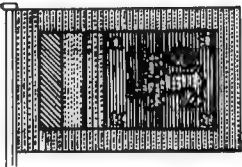


FORT WALSH.	1950, R.C.N., Official.
FORT PITT (ex-ML 119) FORT SELKIRK (ex-ML 114)	FORT STEEL (ex-ML 117) FORT WALSH (ex-ML 112)
Dimensions:	112 × 17½ × 4½ feet
Machinery:	2 Hall-Scott Defender engines.
	B.H.P.: 1,260 = 20 kts.

Note.—There are also over a dozen harbour patrol craft.

ROYAL CEYLON NAVY

Flags.



SAFFRON.
ORANGE.
MAROON.
GREEN.

NATIONAL and JACK.

Vessels of the Royal Ceylon Navy wear the White Ensign.  
The Ceylonese Flag as shown is flown as a Jack.

Administration.

The Royal Ceylon Navy came into being on 9 Dec. 1950, the date on which the Navy Act was proclaimed.

Captain of the Navy : Captain J. R. S. Brown, R.N.  
Chief of Staff : Commander G. R. M. de Mel, O.B.E., R.Cy.N.

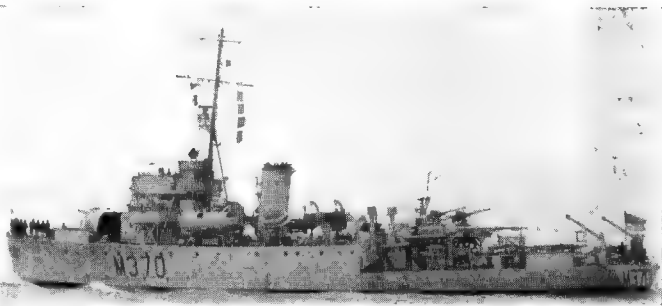
Personnel.

35 officers and 458 ratings

Naval Establishments.

H.M.Cy.S. Gemunu at Colombo.  
H.M.Cy.S. Rangalla, A Training Camp at Diyatalawa.

Ocean Minesweeper.



1954, Wright & Logan.

VIJAYA (ex-H.M.S. Flyingfish, ex-Tillsburg)	
Builders :	Redfern Construction Co.
Laid down :	30 Oct. 1943
Launched :	16 Feb., 1944
Displacement :	1,040 tons (1,335 tons full load)
Dimensions :	235 (o.a.) × 35½ × 11½ (max.) feet
Guns :	1—4 inch, 2—40 mm. AA., 2 saluting, 2 D.C.T.
Machinery :	Triple expansion. 2 shafts. I.H.P. : 2,000 = 16.5 kts.
Boilers :	2, of 3-drum type
Complement :	85

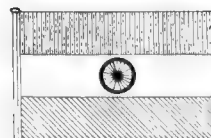
Notes.—Formerly of the fastest and most efficient class of minesweepers, frequently used as escort vessels, in the British Navy. Transferred to Ceylon Government, Sept., 1949  
Pendant No. M 370.

# INDIAN NAVY

## Flags.

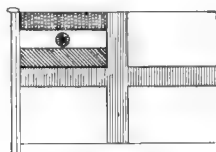


PRESIDENT

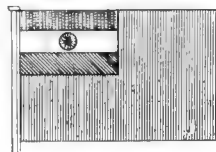


JACK

Note.—Upper left and bottom right cantons are blue, remaining two red.)



ENSIGN.



MERCANTILE.

Note.—Size of Ensign has been changed to length one and a half times the breadth to bring it into line with British White Ensign.

Flags: I.N. ships fly as an ensign a white flag bearing a red St. George's Cross with the Indian Flag (as above) in the upper canton next to the staff. A white pendant is flown at the masthead. The Indian Flag (as above) is flown as a Jack. Flag Officers fly the flag appropriate to their naval rank.

## Administration.

Minister for Defence Organisation : Shree Mahivar Tyagi.

Chief of Naval Staff and Commander-in-Chief, Indian Navy : Vice-Admiral Sir Mark Pizey, K.B.E., C.B., D.S.O. & Bar

Deputy C.-in-C. and Chief of Staff : Commodore R. D. Katari, I.N.

Flag Officer Flotilla, Indian Fleet : Rear-Admiral F. A. Ballance, C.B., D.S.O.

Chief of Personnel : Captain B. A. Samson, I.N.

Chief of Material : Captain I. F. M. Newnham, R.N.

Chief of Administration : Captain M. K. Heble, I.N.

Chief of Naval Aviation : Captain J. E. Smallwood, R.N.

Surveyor-in-Charge, Marine Survey of India : Captain S. J. Hennessey, O.B.E., F.R.I.C.S., R.N.

Commodore-in-Charge, Bombay : Commodore A. Chakraverti, I.N.

Commodore-in-Charge, Cochin : Commodore B. S. Soman, I.N.

Naval Officer-in-Charge, Vizagapatam : Captain R. Sawhny, I.N.

Naval Adviser, London : Captain G. S. Kapoor, I.N.

## Personnel.

1954: 700 officers; 7,000 ratings.

## Naval Establishments.

Naval Headquarters at New Delhi.

I.N.S. Venduruthy at Cochin (Gunnery, Torpedo and Anti-Submarine, Communications, Seamanship,

Navigation, and Supply and Secretariat Schools). I.N.S. Venduruthy II at Cochin (Naval Air Station).

I.N.S. Circars at Vizagapatam (Boys' Training Establishment).

I.N.S. Valsura at Jamnagar (Electric and Radar School).

I.N.S. Angre at Bombay (Indian Naval Barracks).

I.N.S. Shivaji at Lonavla (Mechanical Training Establishment).

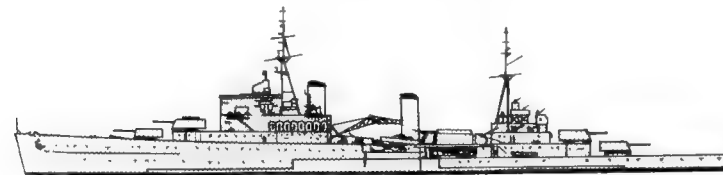
I.N.S. Ashvini at Bombay (Indian Naval Hospital)

## Uniforms.

I.N. officers wear the same uniforms as the R.N. except the cap badge and buttons when the crown is substituted by the "Asoka" Pillar.

## Silhouettes.

\* Scale : 150 ft. = 1 inch.



NIGERIA.\*



DELHI.



ROHILKHAND.\*



RANA.\* (RANJIT without ▲ on foremast).



RAJPUT.\*



CAUVERY.



SUTLEJ. (JUMNA without lower projection on mast).



INVESTIGATOR.



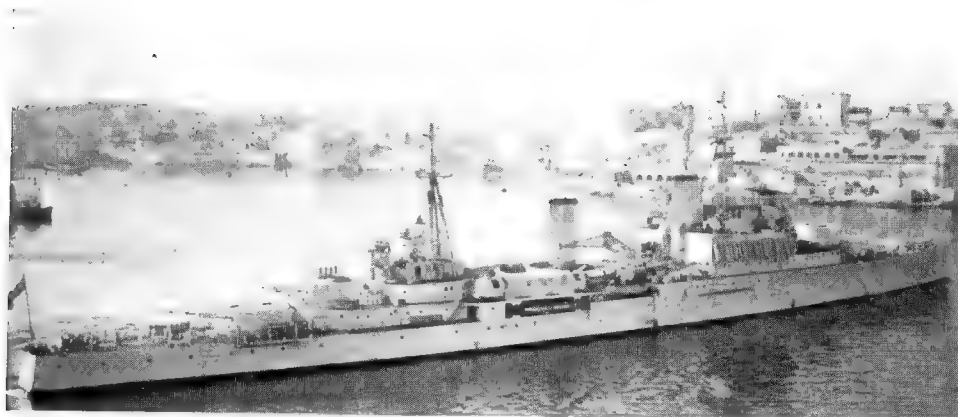
TIR.\*

## Mercantile Marine.

Lloyd's Register appendix, 1954 : 203 vessels of 490,697 tons gross.

## INDIA—Cruisers

### Cruiser



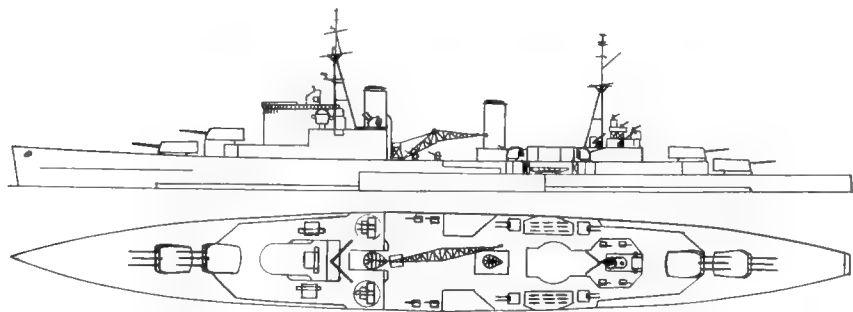
NIGERIA.

Added 1954, Official.

#### NIGERIA

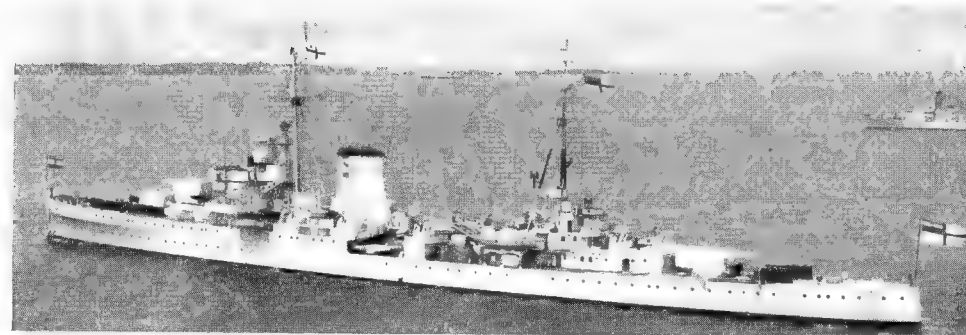
Builders : Vickers-Armstrongs, Ltd., Tyne  
 Engineers : Parsons  
 Laid down : 8 Feb. 1938  
 Launched : 18 July 1939  
 Completed : 20 Sep. 1940

Displacement : 8,700 tons (11,040 tons full load)  
 Dimensions : Length: 549 (w.l.), 555½ (o.a.) feet. Beam 62 feet. Draught: 16½ (mean), 21 (max.) feet  
 Guns : 12—6 inch, 8—4 inch AA., 4—40 mm. AA., 8—2 pdr., 4—20 mm. AA.  
 Tubes : 6—21 inch (tripled)  
 Armour : 4½—3" side, 2" turrets, 4" C.T., 2" deck  
 Machinery : Parsons geared turbines. 4 shafts. S.H.P. : 72,500 = 31.5 kts.  
 Boilers : 4 Admiralty 3-drum type  
 Complement : 730



Notes.—Purchased from Great Britain 1954 (announced 8 April) and refitted in a United Kingdom shipyard before commissioning for service.

### Cruiser.



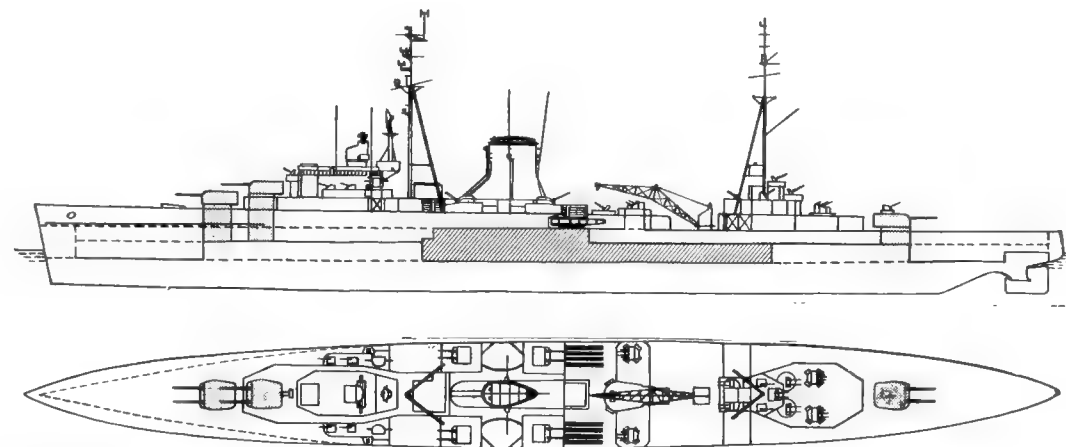
DELHI.

1954, Skyfotos.

#### DELHI (ex-Achilles)

Builders : Cammell Laird & Co., Ltd., Birkenhead  
 Laid down : 11 June 1931  
 Launched : 1 Sept. 1932  
 Completed : 10 Oct. 1933

Displacement : 7,030 tons (9,740 tons full load).  
 Dimensions : Length: 530 (pp.), 554½ (o.a.) feet. Beam: 55½ feet. Draught: 16 feet (mean), 20 feet (max.)  
 Guns : 6—6 inch, 8—4 inch AA., 15—40 mm. AA., 4—3 pdr.  
 Tubes : 8—21 inch (quadrupled)  
 Armour : 4"—2" side, 1" gunhouses, 1" bridge, 2" deck  
 Machinery : Parsons geared turbines. 4 shafts. S.H.P. : 72,000 = 32 kts.  
 Boilers : 4 Admiralty 3-drum type  
 Oil fuel : 1,800 tons  
 Complement : 680



Notes.—Purchased from Great Britain and delivered 5 July, 1948. As H.M.S. Achilles, this ship, with H.M.S. Ajax and H.M.S. Exeter, defeated the German armoured ship (pocket battleship) Admiral Graf Spee in the Battle of the River Plate, 17 Dec. 1939. The Achilles was at that time lent to the Royal New Zealand Navy.



Destroyers.



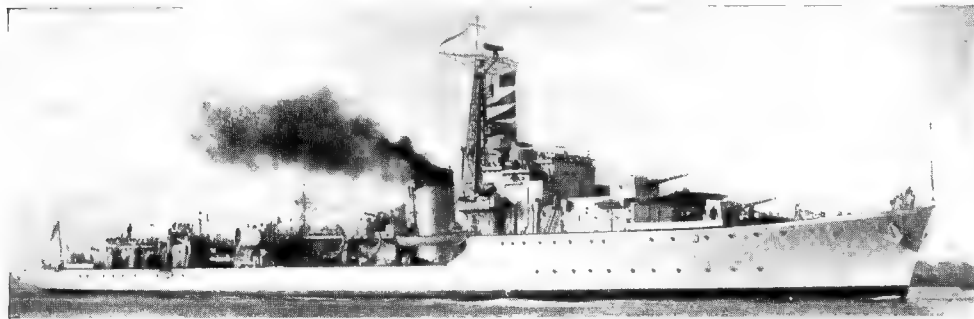
RANJIT.

Added 1954, Wright & Logan.



RANA.

1953 I.N., Official.



RAJPUT.

**RANA** (ex-Raider)  
Displacement: 1,705 tons (*Rajput* 1,750 tons standard; 2,425 tons (*Rajput* 2,510 tons) full load)  
Dimensions: 358½ × 35½ × 9½ (mean), 16 (max.) feet  
Guns: 4—4.7 inch, 4—2 pdr. pompoms, 6—20 mm. AA.; but *Rana* and *Ranjit* have 4—40 mm. AA.  
Tubes: 8—21 inch (two quadruple mountings), 4 D.C.T.  
Machinery: Parsons geared turbines. 2 shafts. S.H.P.: 40,000 = 34 kts. (max.), 32 kts. sea speed  
Boilers: 2 Admiralty 3-drum type

**RAJPUT** (ex-Rotherham), Leader  
**RANJIT** (ex-Redoubt)  
Added 1953, Wright & Logan.

General Notes.—First British destroyers with officers' accommodation forward instead of aft. Refitted and modernised prior to transfer, *Ranjit* July 4, 1949; *Rajput* July 29, 1949; *Rana* Sept., 1949. Arrived in Indian waters Jan. 1950. Constitute the 11th Destroyer Squadron of which *Rajput* is Leader.

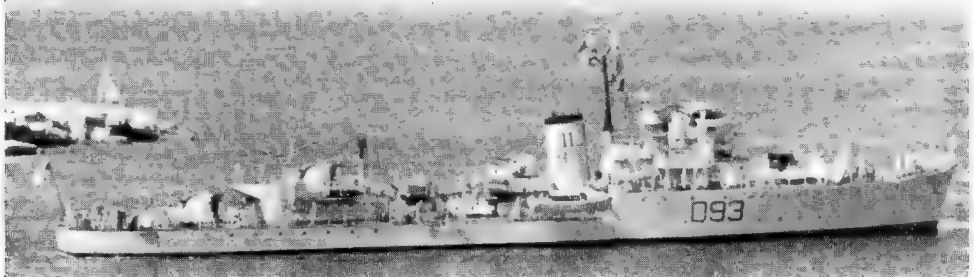
Pendant No.	Name	Builders	Began	Launched	Completed
D 115	<i>Rana</i>	Cammell Laird & Co., Ltd., Birkenhead	16 Apr. 1941	1 Apr. 1942	16 Nov. 1942
D 209	<i>Rajput</i>	John Brown & Co., Ltd., Clydebank	10 Apr. 1941	21 Mar. 1942	27 Aug. 1942
D 141	<i>Ranjit</i>	John Brown & Co., Ltd., Clydebank	19 June 1941	2 May 1942	1 Oct. 1942

3 "Hunt" Type II



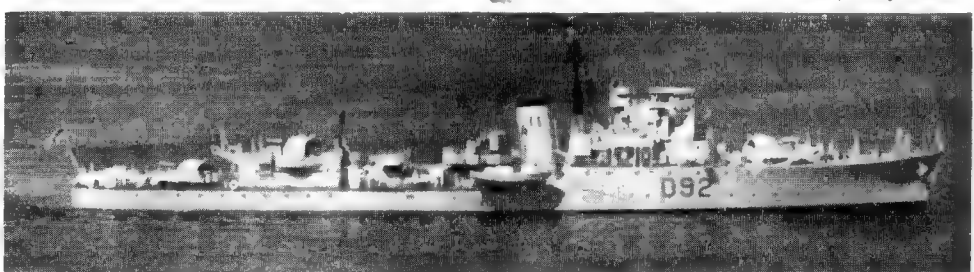
GOMATI.

1954, A. & J. Pavia.



GANGA.

1954, A. & J. Pavia.



GODAVARI.

1953, A. & J. Pavia.

**GANGA** (ex-Chiddingfold)

Displacement : 1,050 tons standard (1,610 tons full load)  
Dimensions : 264½ (p.p.), 280 (o.a.) × 31½ × 7½ (mean), 14 (max.) feet  
Guns : 6—4 inch AA., 4—2 pdr. pompoms, 2 to 4—20 mm. AA.  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 19,000 = 25 kts.  
Boilers : 2 Admiralty 3-drum type  
Oil fuel : 280 tons  
Complement : 146

**GODAVARI** (ex-Bedale, ex-Slajak, ex-Bedale)

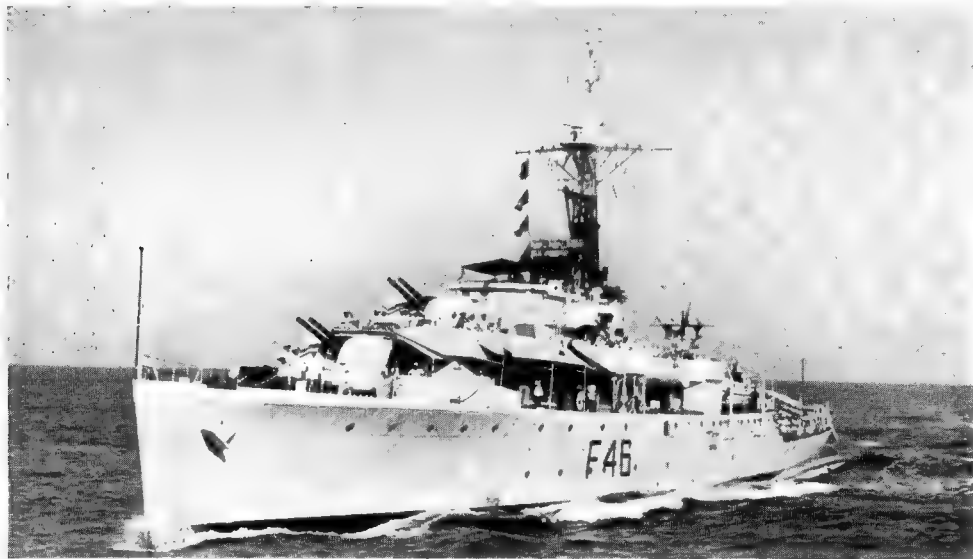
Displacement : 1,050 tons standard (1,610 tons full load)  
Dimensions : 264½ (p.p.), 280 (o.a.) × 31½ × 7½ (mean), 14 (max.) feet  
Guns : 6—4 inch AA., 4—2 pdr. pompoms, 2 to 4—20 mm. AA.  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 19,000 = 25 kts.  
Boilers : 2 Admiralty 3-drum type  
Oil fuel : 280 tons  
Complement : 146

**GOMATI** (ex-Lamerton)

Notes.—"Hunt" class, Type II frigates (ex-Escort Destroyers) F 131, F 126, and F 88, respectively. Transferred from Great Britain April/May, 1953. Lent to Indian Navy for a period of three years, subject to extension by agreement. Now officially rated as destroyers with D pendant Nos.

Pendant No.	Name	Builders	Laid down	Launched	Completed
D 94	<i>Ganga</i>	Scott's Shipbuilding & Engineering Co. Ltd. Greenock	1 Mar. 1940	10 Mar. 1941	16 Oct. 1941
D 92	<i>Godavari</i>	R. & W. Hawthorn, Leslie & Co. Ltd. Hebburn	29 May 1940	5 Sep. 1941	18 June 1942
D 93	<i>Gomati</i>	Swan, Hunter & Wigham Richardson, Ltd. Wallsend	10 Apr. 1940	14 Dec. 1940	16 Aug. 1941

Frigates (ex-Sloops).  
2 “Cauvery” Class.



KISTNA. 1954, I.N., Official.



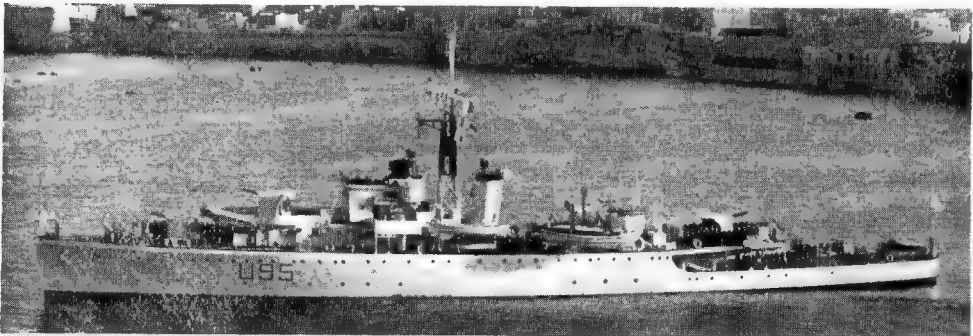
CAUVERY. KISTNA 1951, I.N., Official.

Displacement: 1,470 tons (1,925 tons full load)  
Dimensions: 292½ (pp.), 299½ (o.a.) × 38½ × 11½ feet  
Guns: 6—4 inch, 2—40 mm. AA., 2—20 mm. AA., 110 D.C. carried  
Machinery: Parsons geared turbines 2 shafts. S.H.P.: 4,300 — 19 kts  
Boilers: of 3-drum type  
Complement:

Frigates (ex-Sloops)—continued.  
2 “Jumna” Class.



JUMNA. 1954, A. & J. Pavia.



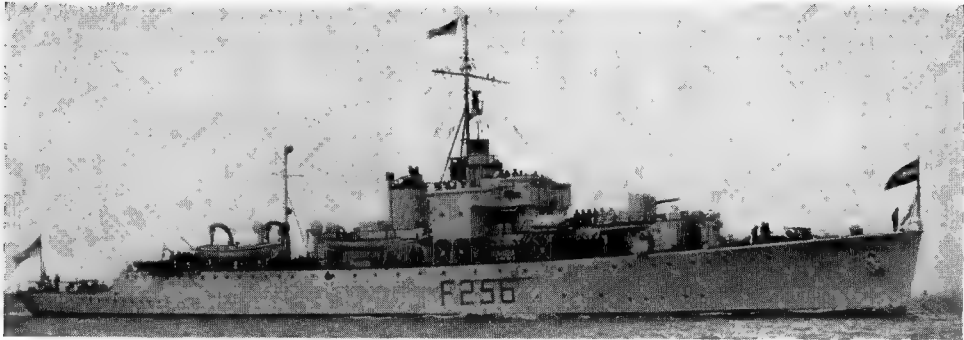
SUTLEJ. Added 1953, A. & J. Pavia.

UMNA	SUTLEJ
Displacement:	1,300 tons (1,735 tons full load)
Dimensions:	266 (w.l.), 292½ (o.a.) × 37½ × 10½ (mean) feet
Guns:	6—4 inch, 6—20 mm. AA., 4 D.C.T. (88 D.C's.)
Machinery:	Parsons geared turbines. 2 shafts. S.H.P.: 3,600 = 18 kts.
Boilers:	2 Admiralty 3-drum type
Complement:	160 to 197

Notes.—Jumna together with the Cauvery and Kistna (see adjoining column) constitute the 12th Frigate Squadron. Sutlej is employed as a survey ship.

Pendan tNo.	Name	Builders	Laid down	Launched	Completed
110	Cauvery	Yarrow & Co., Ltd., Scotstoun, Glasgow Wm. Denny & Bros., Ltd., Leven Shipyard, Dumbarton	28 Oct. 1942	15 June 1943	21 Oct. 1943
46	Kistna		14 July 1942	22 Apr. 1943	26 Aug. 1943
11	Jumna		20 Feb. 1940	16 Nov. 1940	13 May 1941
95	Sutlej		4 Jan. 1940	1 Oct. 1940	23 Apr. 1941

Training Frigate.



1954, Wright & Logan.

TIR (ex-Bann)

Displacement : 1,460 tons standard (2,000 tons full load)  
Dimensions : 301½ (o.a.) × 283 (pp.) × 36½ × 14 feet  
Guns : 2—4 inch  
Machinery : Reciprocating vertical 4-cylinder triple expansion. 2 shafts. I.H.P.: 5,500 = 18 kts.  
Boilers : 2 Admiralty 3-drum type  
Oil fuel : 440 tons  
Complement : 118

Notes.—Former "River" class frigate in Royal Navy. Converted to Training Frigate by Bombay Dockyard, 1948. Sister ship of survey ship Investigator, below.

Survey Ship (Frigate).



1952, I.N., Official.

INVESTIGATOR (ex-Kukri, ex-Trent)

Displacement : 1,460 tons (2,000 tons full load)  
Dimensions : 301½ (o.a.) × 36½ × 12 feet  
Machinery : Triple expansion. I.H.P.: 5,500 = 20 kts. (max.)  
Boilers : 2 Admiralty 3-drum type

Notes.—Former "River" class frigate in Royal Navy. Converted to a surveying vessel and renamed Investigator in 1951. Sister ship of training frigate Tir, above.

Pendant No.	Name	Builders	Laid down	Launched	Completed
F 243	Investigator	} Charles Hill & Sons, Ltd., Bristol	31 Jan. 1942	10 Oct. 1942	27 Feb. 1943
F 256	Tir		18 June 1942	29 Dec. 1942	7 May 1943

Fleet Minesweepers.

3 "Bathurst" Class.

BENGAL

Displacement: 790 tons standard (1,025 full load)  
Dimensions: 186½ × 31 × 8½ feet  
Guns: 1—12 pdr., 1—40 mm. AA., 2—20 mm. AA.  
Machinery: Triple expansion. 2 shafts. I.H.P.: 2,000 = 15 kts.  
Boilers: 2 Admiralty 3-drum, small tube type  
Complement: 87

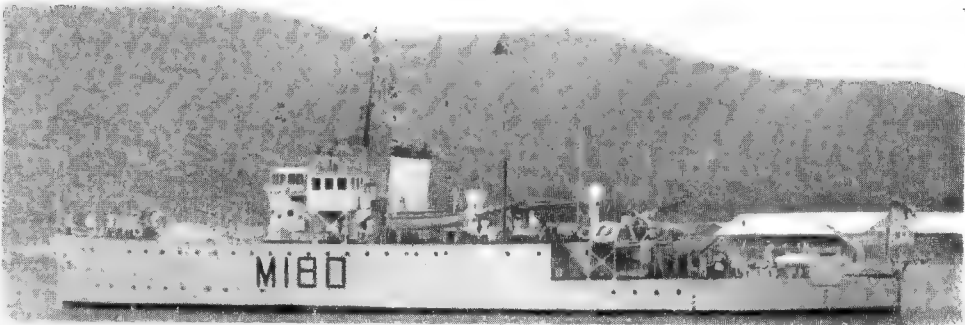
BOMBAY

MADRAS

Note.—Designed displacement was 650 tons standard (860 tons full load)

Pendant No.	Name	Builders	Launched
M 243	Bengal	Cockatoo Docks, Sydney	1942
M 249	Bombay	Mort's Dock, Sydney	1942
M 237	Madras	Cockatoo Docks, Sydney	1942

3 "Bangor" Class.



ROHILKHAND

1952, I.N., Official.

ROHILKHAND (ex-Padstow)

Displacement: 605 tons (780 tons full load)  
Dimensions: 174 (o.a.) × 28½ × 10½ feet  
Guns: 3—20 mm.  
Machinery: Geared turbines by Parsons Co. 2 shafts. I.H.P.: 2,000 = 15.5 kts.  
Boilers: 2 Admiralty 3-drum type  
Complement: 87

KONKAN (ex-Tilbury)

RAJPUTANA (ex-Lyme Regis)

Displacement: 656 tons (825 tons full load)  
Dimensions: 171½ (pp.), 180 (o.a.) × 28½ × 9½ feet  
Guns: Rajputana, 1—12 pdr., 1—2 pdr., 2—20 mm.; Konkan, 1—2 pdr., 4 M.G.  
Machinery: Triple expansion. 2 shafts. I.H.P.: 2,000 = 16.5 kts.  
Boilers: 2 Admiralty 3-drum type  
Complement: 87

Pendant No.	Name	Builders	Laid down	Launched	Completed
M 228	Konkan	Lobnitz & Co., Ltd., Renfrew	15 Aug. 1941	18 Feb. 1942	12 June 1942
M 197	Rajputana	Lobnitz & Co., Ltd. Renfrew	21 Jan. 1941	31 Dec. 1941	30 Apr. 1942
M 180	Rohilkhand	Wm. Hamilton & Co., Ltd., Port Glasgow	29 Aug. 1941	29 Oct. 1942	5 Feb. 1943

Note.—The above six ships of the "Bangor" and "Bathurst" classes constitute the 31st Minesweeping Squadron.

INDIA—Motor Minesweepers, Launches, Landing Craft, etc.

Motor Minesweepers

<b>BARQ</b> (ex-MMS 132)	<b>MMS 130</b>	<b>MMS 154</b>
Displacement:	282 tons	
Dimensions:	105 (o.a.) × 23 × 9½ feet	
Guns:	2—20 mm. AA., 2 M.G.	
Machinery:	Diesel. B.H.P.: 500 = 10 kts.	
Complement:	30	

Note.—Of wooden construction.

Torpedo Motor Launch.



1952, I.N. Official

<b>ML 6420</b> (ex-ML 420)	
Displacement:	65 tons
Dimensions:	112 × 18½ × 5 (max.) feet
Guns:	1—40 mm. AA., 3—20 mm. AA.
Machinery:	2 Hall-Scott Defender engines. B.H.P.: 1,200 = 20 kts.
Complement:	18

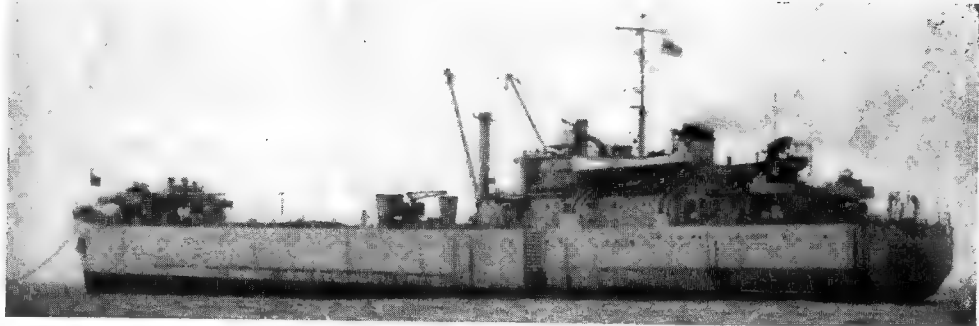
Notes.—Fairmile "B" type. At Bombay for training duties. Used as a Torpedo School Torpedo Firing Ship. Pendant No. P 6420

Seaward Defence Motor Launches.

<b>SDML 3110</b> (ex-HDML 1110)	<b>SDML 3112</b> (ex-HDML 1112)	<b>SDML 3118</b> (ex-HDML 1118)
Displacement:	46 tons (54 tons full load)	
Dimensions:	72 (o.a.) × 15½ × 5½ feet	
Guns:	1—3 pdr., 1—20 mm. AA.	
Machinery:	Diesel. 2 shafts. B.H.P.: 320 = 12 kts.	
Complement:	14	

Notes.—These motor launches constitute the 321st Sea Land Patrol Craft Squadron.

Tank Landing Ship.



MAGAR.

Added 1953, I.N. Official.

<b>MAGAR</b> (ex-Avenger, ex-LST (3) 3011)	
Displacement:	2,256 tons light (4,890 tons full load)
Dimensions:	347½ (o.a.) × 55½ × 12½ feet
Guns:	2—40 mm. Bofors AA.
Machinery:	Vertical reciprocating, 4 cylinder. 2 shafts
Speed:	12.75 kts.
Complement:	64

Tank Landing Craft.

<b>LCT 1117</b>	<b>LCT 1294</b>	<b>LCT 1298</b>	<b>LCT 1310</b>	<b>LCT 1315</b>	<b>LCT 1358</b>	<b>LCT 1360</b>
-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------

Fleet Replenishment Ship.

<b>SHAKTI</b>
Notes.—Rated as Fleet Replenishment Group Tanker. Acquired from Italy in Nov. 1953.

Oilers.

<b>CHILKA</b>	<b>SAMBHAR</b>
Displacement:	1,082 tons
Dimensions:	202 × 30½ × 13 feet
Machinery:	Triple expansion. I.H.P.: 809 = 9 kts.
Oil Capacity:	800 tons

Notes.—Both acquired in 1948. Engined by David Rowan & Co. Two steam dynamos, two steam pumps, ballast pump.

Name	Builders	Launched
Chika Sambhar	Blythwood Shipbuilding Co., Scoutstoun A. & J. Inglis, Ltd., Glasgow	1942

Ocean Tug.

<b>HATHI</b>	Builders:	Taikoo Dock & Eng. Co., Hong Kong
	Launched:	1932
Displacement:	668 tons	
Dimensions:	147½ × 32½ × 12 feet	
Machinery:	Triple expansions	
Speed:	13.5 kts.	

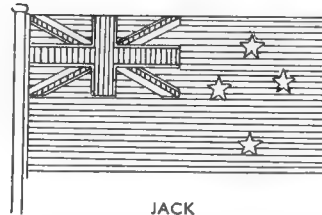


# ROYAL NEW ZEALAND NAVY

## Flags.



GOVERNOR-GENERAL.



JACK

Ships of the Royal New Zealand Navy wear the White Ensign, and pendant is flown as in the Royal Navy.

## Administration.

Commander-in-Chief: H. E. Lieut.-General Sir Charles Willoughby Moke Norrie, K.C.M.G., C.B., D.S.O., M.C.

## Naval Board.

Chairman: The Minister of Defence the Hon. T. L. Macdonald, M.P.  
First Naval Member and Chief of Naval Staff: Commodore Sir Charles E. Madden, Bt., R.N.  
Second Naval Member: Captain V. J. H. Van der Byl, D.S.C., R.N.  
Third Naval Member: Act. Captain (S) R. A. J. Owen, R.N.  
Navy Secretary: Mr. D. A. Wraight,

Royal New Zealand Naval Liaison Officer, London: Commander A. B. Gilfillan, V.R.D., R.N.Z.N.  
Royal New Zealand Naval Liaison Officer, Melbourne: Captain G. R. Davis-Goff, D.S.C. & Bar, R.N.Z.N.

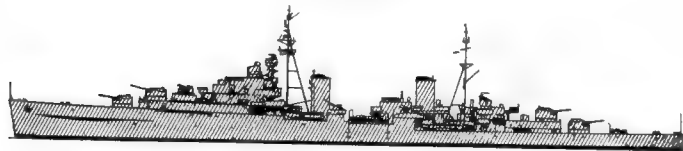
## Personnel.

December, 1952: 2,782 officers and ratings.

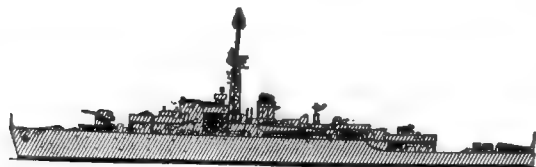
## Uniforms.

Same as in Royal Navy (See page 1.)

## Silhouettes.



BELLONA, BLACK PRINCE.



LAKE (ex-Loch) Class.

## Mercantile Marine.

Lloyd's Register appendix, 1954: 170 vessels of 248,101 tons gross.

## Cruisers.

### 2 Modified "Dido" Class.



BLACK PRINCE.

1954, R.N.Z.N., Official.



BELLONA.

1953, R.N.Z.N., Official.

### BELLONA

### BLACK PRINCE

Displacement: 5,900 tons (7,410 tons full load)  
Dimensions: Length: 512 (o.a.) feet. Beam: 52 feet. Draught: 15 (mean), 18½ (max.) feet  
Guns: 8—5.25 inch, 4—40 mm., 12—2 pdr. AA., 3—20 mm. AA., 4—3 pdr. (saluting)  
Tubes: 6—21 inch (tripled)  
Armour: 2" side, 1" turrets  
Machinery: Parsons single reduction geared turbines. 4 shafts. S.H.P.: 62,000 = 32 kts  
Boilers: 4 Admiralty 3-drum type  
Complement: 535—551 (peace)

Notes.—Built under War Estimates. Sister ships of *Diadem* and *Royalist* in Royal Navy. Both these ships are lent by the Admiralty to the New Zealand Government, who pay for their annual maintenance. *Black Prince* recommissioned in January 1953. *Bellona* is being used as a stationary training ship at Auckland. For plan and elevation see Great Britain section, page 24 (silhouette on left of this page).

Name	Builders and Machinery	Laid down	Launched	Completed
<i>Bellona</i>	Fairfield S. B. & Eng. Co., Ltd., Glasgow	30 Nov. 1939	29 Sept. 1942	29 Oct. 1943
<i>Black Prince</i>	Harland & Wolff, Ltd., Belfast	2 Nov. 1939	27 Aug. 1942	20 Nov. 1943

NEW ZEALAND—Frigates, Ocean Minesweepers

A/S Frigates.

6 "Lake" (ex- "Loch") Class.



KANIERE.

1951, R.N.Z.N., Official.



HAWEA.

1951, A. & J. Pavia.

**HAWEA** (ex-Loch Eck)  
**KANIERE** (ex-Loch Achray)

Displacement: 1,435 tons (2,260 tons full load)  
Dimensions: 286 (pp.), 307½ (o.a.) × 38½ × 12 (mean), 14½ (max.) feet, deep load  
Guns: 1—4 inch, 4—2 pdr. pompoms, 6—20 mm. AA.  
A/S Weapons: 2 squids  
Machinery: Vertical reciprocating 4-cylinder triple expansion. 2 shafts. I.H.P.: 5,500 = 19.5 kts.  
Boilers: 2 Admiralty 3-drum type  
Oil fuel: 724 tons  
Complement: 114

**PUKAKI** (ex-Loch Achanalt, ex-Naver)  
**ROTOITI** (ex-Loch Katrina)

**TAUPO** (ex-Loch Shin)  
**TUTIRA** (ex-Loch Morlich)

Notes.—Purchased from Great Britain in 1948, and renamed after New Zealand lakes. The six ships constitute the 11th Frigate Squadron

Pendant No.	Name	Builders	Laid down	Launched	Completed
F 422	Hawea	Smith's Dock Co., Ltd., South Bank-on-Tees	25 Oct. 1943	25 Apr. 1944	7 Nov. 1944
F 426	Kaniere	Smith's Dock Co., Ltd., South Bank-on-Tees	13 Dec. 1943	7 July, 1944	1 Feb. 1945
F 424	Pukaki	Henry Robb, Ltd., Leith	14 Sept. 1943	23 Mar. 1944	11 Aug. 1944
F 625	Rotoiti	Henry Robb, Ltd., Leith	31 Dec. 1943	21 Aug. 1944	29 Dec. 1944
F 421	Taupo	Swan, Hunter & Wigham Richardson, Ltd., Tyne	6 Sept. 1943	23 Feb. 1944	10 Oct. 1944
F 517	Tutira	Swan, Hunter & Wigham Richardson, Ltd., Tyne	15 July 1943	25 Jan. 1944	2 Aug. 1944

Ocean Minesweepers.

4 "Bathurst" Class.



KIAMA.

1953, R.N.Z.N., Official.



R.A.N., Official.

**ECHUCA**

**INVERELL**

**KIAMA**

**STAWELL**

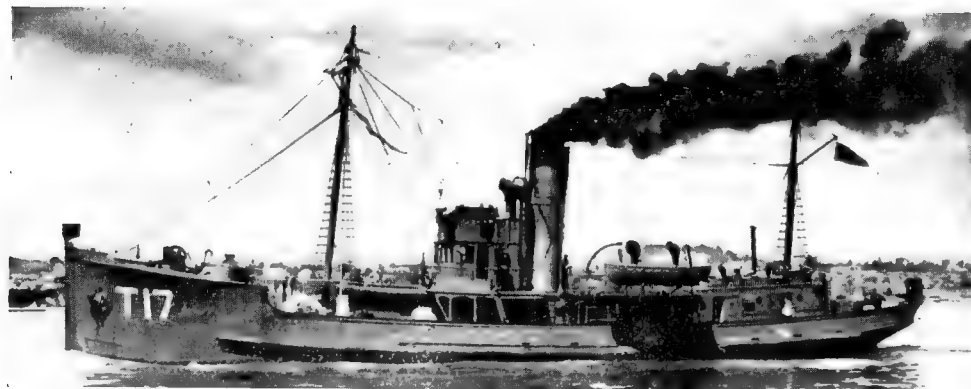
Displacement : 790 tons standard (1,025 tons full load)  
Dimensions : 186 (o.a.), 162 (pp.), × 31 × 8½ (mean) feet  
Guns : 1—4 inch, 1—40 mm. AA., 6 M.G.  
Machinery : Triple Expansion 2 shafts. I.H.P. : 1,800 = 15 kts.  
Boilers : 2 Admiralty 3-drum small tube type.

Note.—These four vessels were given to New Zealand by Australia in 1952. They were then refitted and modernised in New Zealand

Pendant No.	Name	Builders	Launched
M 252	Echuca	Williamstown Naval Dockyard, Melbourne	17 Jan. 1943
M 233	Inverell	Mort's Dock, Sydney	2 May 1942
M 353	Kiama	Evans Deakins, Brisbane	3 July 1943
M 348	Stawell	Williamstown Naval Dockyard, Melbourne	3 Apr. 1943

## Minesweeping Trawlers, etc.—NEW ZEALAND

### Minesweeping Trawlers.



HINAU.

Added 1951, R.N.Z.N., Official.

#### HINAU

#### RIMU

Displacement: 625 tons  
Dimensions: 126 (o.a.)  $\times$  23½  $\times$  14 feet  
Guns: 1—12 pdr.  
Machinery: Triple expansion

Notes.—Built in New Zealand. Launched Aug. 28, 1941 and June 1942, respectively. In reserve at Auckland. War loss: Puriri.

### 4 "Isles" Class.



KILLEGRAY

Added 1950, R.N.Z.N.

#### INCHKEITH

#### KILLEGRAY

#### SANDA

#### SCARBA

Displacement: 545 tons (770 tons full load)  
Dimensions: 150 (pp.), 164 (o.a.)  $\times$  27½  $\times$  10½ feet (13½ max. feet)  
Guns: 1—12 pdr., 3—20 mm.  
Machinery: Triple expansion. I.H.P.: 800 = 12 kts.  
Boiler: 1 cylindrical

Notes.—All of "Isles" class. Paid off 1946. In Reserve at Auckland.

Pendant No.	Name	Builders	Laid down	Launched	Completed
P 155	Inchkeith	John Lewis & Sons, Ltd., Aberdeen	16 Nov. 1940	10 July 1941	24 Oct. 1941
P 174	Killegray	Cook, Welton & Gemmell, Ltd., Beverley	24 Jan. 1941	27 May 1941	7 Nov. 1941
P 160	Sanda	Goole S. B. & Repair Co., Ltd.	23 Dec. 1940	28 July 1941	4 Nov. 1941
P 175	Scarba	Cook, Welton & Gemmell, Ltd., Beverley	6 Mar. 1941	25 June 1941	25 Nov. 1941

### A/S M/S Trawlers (Corvette type).

### 2 "Bird" Class.



KIWI.

1952, R.N.Z.N., Official.

#### KIWI

#### TUI

Displacement: 600 tons (825 tons full load)  
Dimensions: 156  $\times$  30  $\times$  14 feet  
Guns: 1—4 inch, 1—2 pdr., 4 M.G.  
Machinery: Triple expansion. I.H.P.: 1,000 = 14 kts.  
Boiler: 1 cylindrical

Notes.—Both of corvette type. Engined by Plenty & Son. Commissioned as training ships, mainly for reservists.

Pendant No.	Name	Builders	Laid down	Launched	Completed
P 102	Kiwi	Henry Robb, Ltd., Leith	19 Mar. 1940	7 July 1941	28 Oct. 1941
P 33	Tui		19 Mar. 1940	26 Aug. 1941	5 Dec. 1941

### Stores Carriers.

#### COASTGUARD

Notes.—Tender employed as a naval stores carrier.

#### ISA LEI

Dimensions: Length: 114 feet  
Machinery: Diesel

Notes.—This vessel was purchased by the Royal New Zealand Navy during 1952. Motor ship used as a stores and ammunition carrier.

NEW ZEALAND—Surveying Vessels, Motor Launches, etc.

Survey Ship.

I “River” Class.



LACHLAN.

1954, R.N.Z.N., Official.

LACHLAN

Builders :	Mort's Dock, Sydney
Launched :	25 Mar. 1944
Displacement :	1,420 tons (2,220 tons full load)
Dimensions :	301½ × 36½ × 12 feet
Guns :	Removed
Machinery :	Triple expansion, 2 shafts. I.H.P. : 5,500 = 20 kts.
Boilers :	2 Admiralty 3-drum type
Complement :	140

Notes.—Australian “River” class frigate. Lent by the Royal Australian Navy for hydrographic survey work and oceanographic research. Pendant No. F 364. Two surveying motor launches are commissioned to operate with *Lachlan* (see S.D.M.L.s.)

Now that New Zealand has H.M.A.S. *Lachlan* on loan, the proposed construction of a new survey ship in the United Kingdom has apparently been abandoned.

Tenders.

ENDEAVOUR

Dimensions :	Length : 79 feet
--------------	------------------

Note.—Powered scow. Used for lighthouse servicing.

TAIHOA

Dimensions :	Length : 50 feet
--------------	------------------

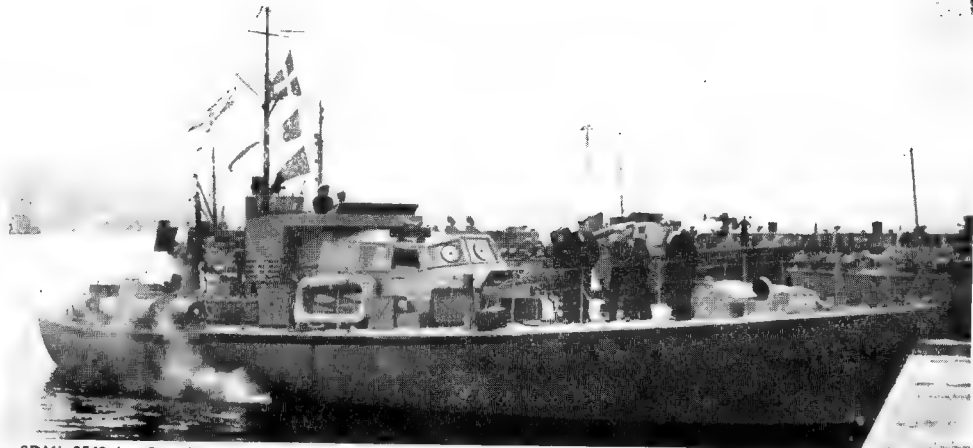
Note.—Motor boat used for harbour duties.

TE ATU

Dimensions :	Length : 65 feet
--------------	------------------

Note.—Fuel lighter used as a harbour diesel carrier.

Seaward Defence Motor Launches.



SDML 3562 (ex-Q1190)

Added 1951, R.N.Z.N., Official.

SDML 3551 (ex-1183)	SDML 3553 (ex-1191)	SDML 3555 (ex-1193)	SDML 3561 (ex-1194)	SDML 3563 (ex-1348)
SDML 3552 (ex-1184)	SDML 3554 (ex-1192)	SDML 3556 (ex-1188)	SDML 3562 (ex-1190)	SDML 3564 (ex-1350)
				SDML 3566 (ex-1187)
Displacement:	46 tons (54 tons full load)			
Dimensions:	72 (o.a.) × 15½ × 5½ feet			
Guns:	1—20 mm. AA., several MG.			
Machinery:	Diesel. 2 shafts. B.H.P.: 320 = 12 kts.			

Notes.—All built in various yards in the United States and Canada and shipped to New Zealand. SDMLs 3556 and 3566 are commissioned as surveying MLs. and operate with *Lachlan*.

Fleet Tug.

TOIA (ex-St. Boniface, ex-St. Fergus)

Launched:	1918
Displacement:	570 tons
Dimensions:	135½ × 29 × 14½ (max.) feet
Machinery:	Triple expansion. I.H.P.: 1,250 = 12 kts.
Coal:	240 tons
Complement:	22

Note.—In reserve at Auckland.

Harbour Tugs.

ARATAKI

MANAWANUI

Dimensions :	Length : 75 feet
Machinery :	Diesel

Note.—Steel tugs. *Arataki* used as a dockyard tug. *Manawanui* used as a diving tender.

HIPI

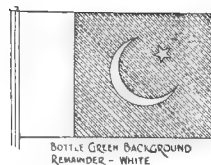
Dimensions :	Length : 56 feet
--------------	------------------

Note.—Motor tow boat used as a dockyard tug.



# ROYAL PAKISTAN NAVY

## Flags.



*Flags :* Ships of R.P.N. fly White Ensign and pendant like H.M. Ships. The Pakistan flag (shown) is worn as a Jack. When entering or leaving harbour R.P.N. ships fly their Jack at the yard. Flag Officers when afloat fly the flags appropriate to their naval rank, corresponding to those of R.N. officers of equivalent rank.

## Administration.

*Minister for Defence :* The Hon. Muhammad Ali

*Commander-in-Chief Royal Pakistan Navy :* Rear-Admiral H. M. S. Choudri, M.B.E., R.P.N.

*Chief of Naval Staff :* Commodore Khalid Jamil, R.P.N.

*Senior Officer, R.P.N. Flotilla :* Captain A. Raschid, R.P.N.

*Secretary, Ministry of Defence :* Major-General Iskander Mirza, C.I.E., O.B.E.

*Joint Secretary, Ministry of Defence :* Mr. Hamid Ali, C.S.P.

*Naval Adviser and Naval Liaison Officer, London :* Captain A. Khan, R.P.N.

## Personnel.

600 officers ; 6,000 ratings

## Naval Establishments

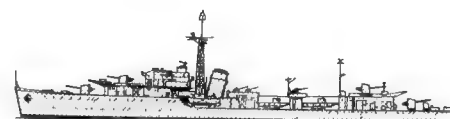
H.M.P.S. <i>Himalaya</i>	(Combined Training Establishment), Karachi.
H.M.P.S. <i>Bahadur</i>	(Boys' Training Establishment), Karachi.
H.M.P.S. <i>Iqbal</i>	(Base and Dockyard), Karachi.
H.M.P.S. <i>Karsaz</i>	(Mechanical Training Establishment), Karachi.
H.M.P.S. <i>Dilawar</i>	(R.P.N. Barracks), Karachi.
H.M.P.S. <i>Bakhtiyar</i>	(Base and Barracks), Chittagong.

## Mercantile Marine.

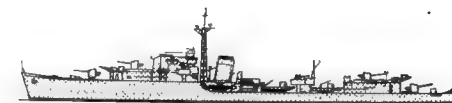
Lloyd's Register appendix, 1954 : 55 vessels of 167,458 tons.

## Silhouettes.

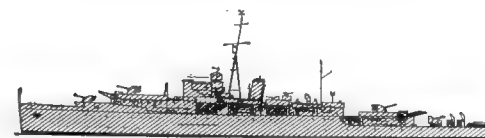
\*Scale : 150 ft. = 1 inch.



TUGHRIL. \*



TARIQ, TIPPU SULTAN\*



JHELUM



SHAMSHER. \*

## Destroyers

I "C" Class



TAIMUR.

1953, A. & J. Pavia.

### TAIMUR (ex-Chivalrous)

Displacement :	1,710 tons standard (2,545 tons full load)
Dimensions :	362½ × 35½ × 10 (mean), 16 (max.) feet
Guns :	3—4.5 inch, 6—40 mm. AA.
Tubes :	4—21 inch (quadrupled)
A/S Weapons :	2 Squids
Machinery :	Parson geared turbines, 2 shafts. S.H.P. : 40,000 = 36.75 kts. (designed)
	36,000 = 31.25 kts. (sea speed)
Boilers :	2 Admiralty 3-drum type
Complement :	200

*Notes.*—Admiralty announced 22 Oct., 1953 that arrangements had been made to lend H.M.S. Chivalrous to the Royal Pakistan Navy for a period of three years in the first instance, subject to extension by agreement, the vessel to be returned on request in an emergency. The ship has been refitted on Merseyside at the expense of the Pakistani Government. Taken over at Liverpool 29 June 1954.

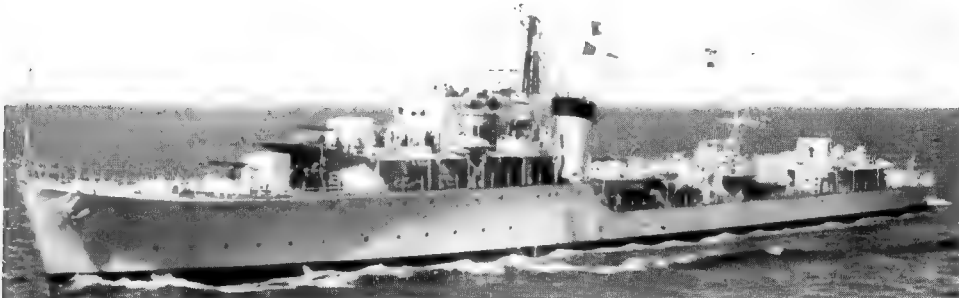
Pendant No.	Name	Builders	Laid down	Launched	Completed
D 21	Taimur	Wm. Denny & Bros., Ltd., Dumbarton	27 Nov. 1943	22 June 1945	13 May 1946

PAKISTAN—Destroyers, Frigates

Destroyers—continued.  
3 "O" Class.



TUGHRIL. 1954, R.P.N. Official.



TIPPU SULTAN 1953, R.P.N., Official.



TARIQ 1952, R.P.N., Official.

TARIQ (ex-Offa)	TIPPU SULTAN (ex-Onslow, ex-Pakenham)	TUGHRIL (ex-Onslaught, ex-Pathfinder)
Displacement:	1,540 tons (2,625 tons full load)	
Dimensions:	338½ (pp.), 345 (o.a.) × 35 × 9 (mean), 15½ (max.) feet	
Guns:	4—4.7 inch, 4—40 mm. AA.	
Tubes:	8—21 inch	
Machinery:	Parson geared turbines. 2 shafts. S.H.P.: 36,000 = 31 kts.	
Boilers:	2 Admiralty 3-drum type	

Notes.—Acquired from Great Britain; *Tippu Sultan* handed over Sept. 30, 1949; *Tariq* Nov. 3, 1949; *Tughril* Mar. 6, 1951.

Pendant No.	Name	Builders	Laid down	Launched	Completed
D 129	<i>Tariq</i>	Fairfield S. B. & Eng. Co., Ltd., Glasgow	15 Jan. 1940	11 Mar. 1941	20 Sept. 1941
D 49	<i>Tippu Sultan</i>	John Brown & Co., Ltd., Clydebank	1 July 1940	31 Mar. 1941	8 Oct. 1941
D 204	<i>Tughril</i>	Fairfield S. B. & Eng. Co., Ltd., Glasgow	14 Jan. 1941	9 Oct. 1941	19 June 1942

Frigates (Ex-Sloops).  
2 "Jhelum" Class.



JHELUM. Added 1954. Skyfotos.



SIND 1952 A. & J. Pavia.

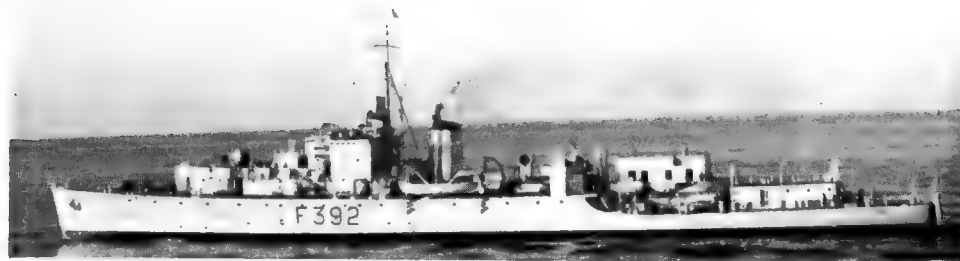
JHELUM (ex-Narbada)	SIND (ex-Godavari)
Displacement:	1,340 tons (1,760 tons full load)
Dimensions:	266 (w.l.), 292½ (o.a.) × 37½ × 10½ (mean) feet
Guns:	6—4 inch, 2—40 mm., 2—20 mm. AA., 4—3 pdr. saluting
Machinery:	Parsons geared turbines. 2 shafts. S.H.P.: 3,600 = 18.25 kts.
Boilers:	2, of 3-drum type
Complement:	144

Note.—*Sind* was refitted in Great Britain by original builders at Southampton, 1949–50, and made a tour of Australian and New Zealand ports, 1951. She has lattice mast. *Jhelum* refitted 1950–51, is fitted as flagship and has tripod mast.

Pendant No.	Name	Builders	Laid down	Launched	Completed
F 40	<i>Jhelum</i>	John I. Thornycroft & Co., Ltd., Woolston, Southampton	30 Aug. 1941	21 Nov. 1942	29 Apr. 1943
F 52	<i>Sind</i>		30 Oct. 1941	21 Jan. 1943	28 June 1943

Frigates—continued.

(Training Ship and Surveying Vessel).



SHAMSHER.

1954, R.P.N. Official.



ZULFIQUAR.

1953 A. & J. Pavia.

SHAMSHER (ex-Nadder)

ZULFIQUAR (ex-Dhanush, ex-Deveron)

Displacement: 1,370 tons (2,100 tons full load)  
 Dimensions: 301½ (o.a.) × 36½ × 12 feet  
 Guns: 1—4 inch, 4—20 mm. AA. (Shamsher 1—4 inch, 4—3 pdr. saluting)  
 Machinery: Triple expansion. I.H.P.: 5,500 = 20 kts.  
 Boilers: 2 Admiralty 3-drum type  
 Complement: 150

Notes.—Former British "River" class frigates. Shamsher, which has extra deckhouses, one in "X" position and one on quarter deck, has been converted to training ship for cadets and boys. "Shamsher" means "sword" in Pakistani. Zulfiqar now converted into a surveying ship, with additional charthouse aft, has strengthened davits and carries survey motor boats. After 4-inch gun removed from both vessels.

Pendant No.	Name	Builders	Laid down	Launched	Completed
F 392	Shamsher	Smith's Dock Co., Ltd., South Bank-on-Tees	11 Mar. 1943	15 Sept. 1943	20 Jan. 1944
F 265	Zulfiqar		16 Apr. 1942	12 Oct. 1942	2 Mar. 1943

Fleet Minesweepers.

4 "Bangor" Class.



BALUCHISTAN

1952, R.P.N., Official.

BALUCHISTAN (ex-Greenock)

CHITTAGONG (ex-Kathiawar, ex-Hartlepool)

Displacement: 605 tons (780 tons full load)  
 Dimensions: 174 (o.a.) × 28½ × 10½ feet  
 Guns: 1—12 pdr., 4—20 mm.  
 Machinery: Geared turbines. 2 shafts. H.P.: 2,000 = 15 kts.  
 Boilers: 2 Admiralty 3-drum type  
 Complement: 87



DACCA.

1952, R.P.N., Official.

DACCA (ex-Oudh)

PESHAWAR (ex-Malwa)

Displacement: 550 tons (711 tons full load)  
 Dimensions: 182 × 28 × 8½ feet  
 Guns: 1—12 pdr., 4—20 mm. AA.  
 Machinery: Triple expansion by Lobnitz. I.H.P.: 2,160 = 15.75 kts.  
 Boilers: 2 Admiralty 3-drum, small-cube type  
 Complement: 87

Pendant No.	Name	Builders	Laid down	Launched	Completed
M 182	Baluchistan	Blyth Dry Docks & S.B. Co., Ltd. Garden Reach Calcutta	28 July 1941	11 May 1942	20 Oct. 1942
M 155	Chittagong		28 Oct. 1941	14 July 1942	23 Dec. 1942
Leader	Dacca			23 Mar. 1942	
M 55	Peshawar			1 June 1944	

PAKISTAN—Trawlers, Motor Launches, etc.

Trawlers.

2 "Lahore" Class



BAHAWALPUR.

1952, R.P.N. Official.

BAHAWALPUR (ex-Barada, ex-Lucknow)

LAHORE (ex-Rampur)

Displacement: 545 tons (770 tons full load)  
Dimensions: 164 (o.a.) × 27½ × 13½ feet  
Guns: 1—12 pdr., 3—20 mm. AA.  
Machinery: Triple expansion. I.H.P.: 850 = 11.5 kts.  
Boiler: 1 cylindrical  
Coal: 181 tons  
Complement: 48

Pendant No.	Name	Builders	Launched
P 149	Bahawalpur	Calcutta	22 Oct. 1941
P 12	Lahore	Calcutta	19 July 1941

Motor Minesweeper.

GHAZI (ex-MMS 131)

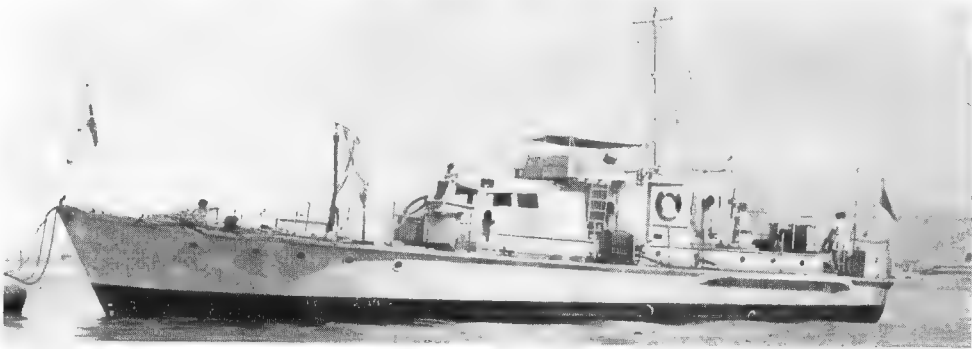
Displacement: 255 tons  
Dimensions: 105 (pp.), 119 (o.a.) × 23 × 9½ feet  
Guns: 2—20 mm. AA., 2 M.G.  
Machinery: Diesel. B.H.P.: 500 = 10 kts.  
Complement: 20

Notes.—Of wooden construction. Built 1942-43.

Patrol Vessels

Notes.—Six small patrol vessels are building at the yard Nicolaas Witsen at Alkmaar and six of the same type at the Sleephelling Mij Scheveningen at Scheveningen. All these ships will be fitted with two 120 h.p. Ruston engines.

Seaward Defence Motor Launches



SDML 3520.

1952, R.P.N., Official.

SDML 3517 (ex-SDML 1261)	SDML 3518 (ex-SDML 1262)	SDML 3519 (ex-SDML 1263)	SDML 3520 (ex-SDML 1266)
Displacement: 46 tons (54 tons full load)	Displacement: 72 (o.a.) × 15½ × 5½ feet	Guns: 1—3 pdr., 1—20 mm. AA.	Machinery: Diesel. 2 shafts. B.H.P.: 320 = 12 kts.
Dimensions: 72 (o.a.) × 15½ × 5½ feet	Guns: 1—3 pdr., 1—20 mm. AA.	Machinery: Diesel. 2 shafts. B.H.P.: 320 = 12 kts.	Complement: 14

Note.—Re-numbered in 1951.

Fleet Replenishment Ship.



ATTOCK.

1954, R.P.N. Official

ATTOCK (ex-Empire Taj, ex-Barbara)

Measurement: 3,065 tons gross  
Dimensions: 313 (o.a.) × 43½ × 27½ feet

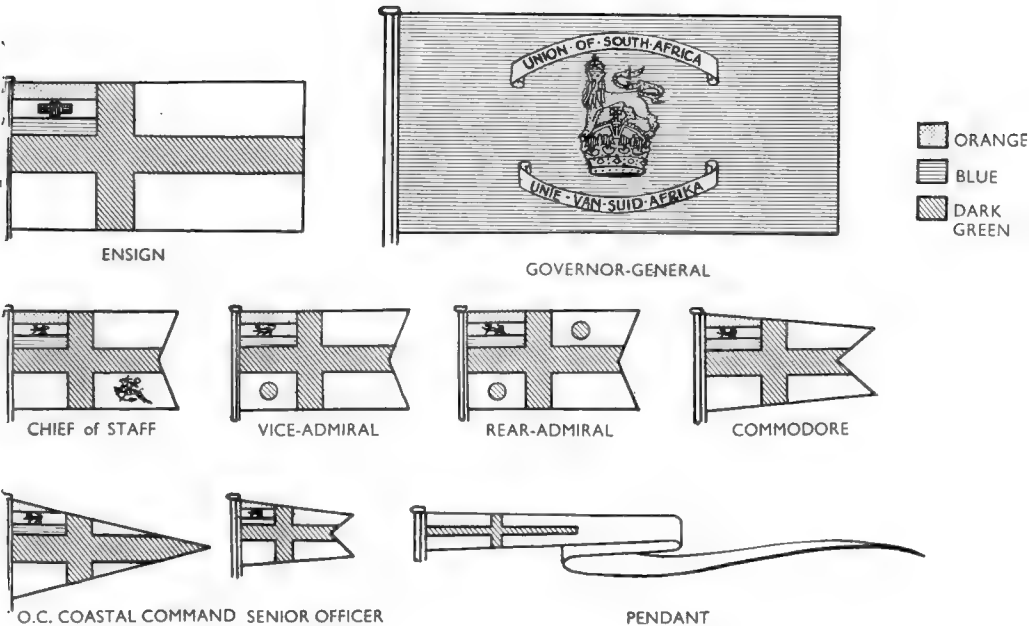
Seagoing Tug

Notes.—One seagoing tug for the Royal Pakistan Navy will be built at the yard of Werf Zeeland, Hansweert. This tug will be equipped with a 1,100 h.p. Crossley diesel engine. She was ordered in August 1952.



# SOUTH AFRICAN NAVY

## Flags.



## Uniforms

Sleeve and shoulder strap markings for officers of the South African Navy, together with the distinguishing colours for the various branches, are identical with those of the Royal Navy, with the addition of the Lion Symbol above the curl. This lion is similar to that above the Union Coat of Arms, Golden Lion guardant over stripes is like the lion in the Royal Standard.

## Administration.

Minister of Defence : Hon. F. C. Erasmus  
 Naval and Marine Chief of Staff : Commodore H. H. Biermann, O.B.E., S.A.N.  
 Officer Commanding Coastal Command : Captain R. P. Dryden-Dymond, E.D., S.A.N.

## Ships.

Ships are referred to as S.A.S. (South African Ship)

## Personnel.

Establishment is 131 officers and 1,499 ratings.

## Mercantile Marine.

Lloyd's Register appendix, 1954 ; 144 vessels of 122,002 tons gross.

## Destroyers.

2 "W" Class.



JAN VAN RIEBEECK.

1954, S.A.N. Official.



SIMON VAN DER STEL.

1953, R. M. Scott.

JAN VAN RIEBEECK (ex-Wessex, ex-Zenith)

SIMON VAN DER STEL (ex-Whelp)

Displacement:	1,710 tons (2,505 tons full load)
Dimensions:	362½ × 35½ × 10 (mean), 16 (max.) feet
Guns:	4—4.7 inch, 1—40 mm. Bofors AA., 4—2 pdr. pompom, 8—20 mm. Oerlikon AA.
Tubes:	8—21 inch (quadrupled)
A/S Weapons:	4 D.C.T.
Machinery:	Parsons geared turbines. 2 shafts. S.H.P.: 40,000 = 36 kts. designed speed (about 33 kts. sea speed)
Boilers:	2 Admiralty 3-drum type
Complement:	186

Notes.—Purchased from Great Britain. Jan van Riebeeck transferred to South Africa, March 29, 1950. and Simon van der Stel in 1952.

Pendant No.	Name	Builders	Laid down	Launched	Completed
D 278	Jan van Riebeeck	Fairfield S.B. & Eng. Co., Ltd., Glasgow	20 Oct. 1942	2 Sep. 1943	11 May 1944
D 237	Simon van der Stel	R. & W. Hawthorn, Leslie & Co., Ltd., Hebburn	1 May 1942	3 June 1943	25 Apr. 1944

SOUTH AFRICA—Frigates and Ocean Minesweepers

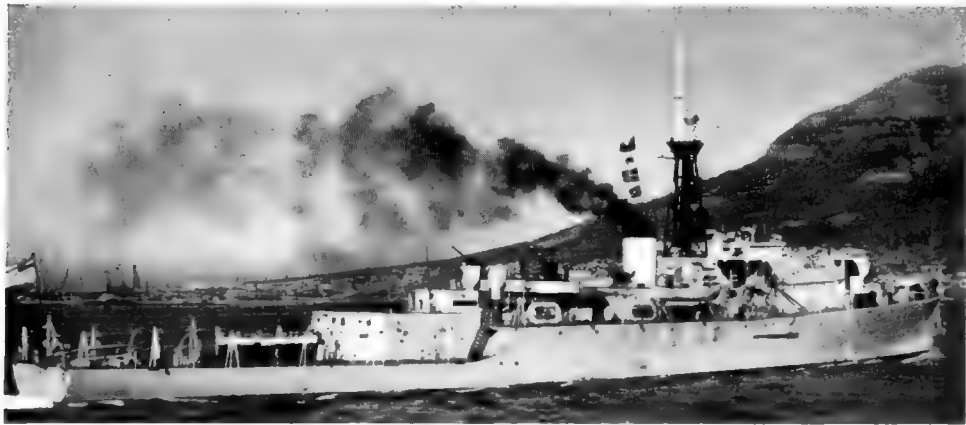
Frigates

3 "Loch" Class.



NATAL.

1951, Official



TRANSVAAL.

1949, R. M. Scott.

GOOD HOPE (ex-Loch Boisdale)

NATAL (ex-Loch Cree)

TRANSVAAL (ex-Loch Ard)

Displacement: 1,435 tons (2,260 tons full load)  
Dimensions: 307 x 38½ x 15 feet  
Guns: 1—4 inch, 1 quadruple 2 pdr. pompom, 6—40 mm. AA.  
A/S Weapons: Squid. D.C.  
Machinery: Triple expansion. 2 shafts. I.H.P.: 5,500 = 19.5 kts. (max.)  
Boilers: 2 Admiralty 3-drum type  
Complement: 140

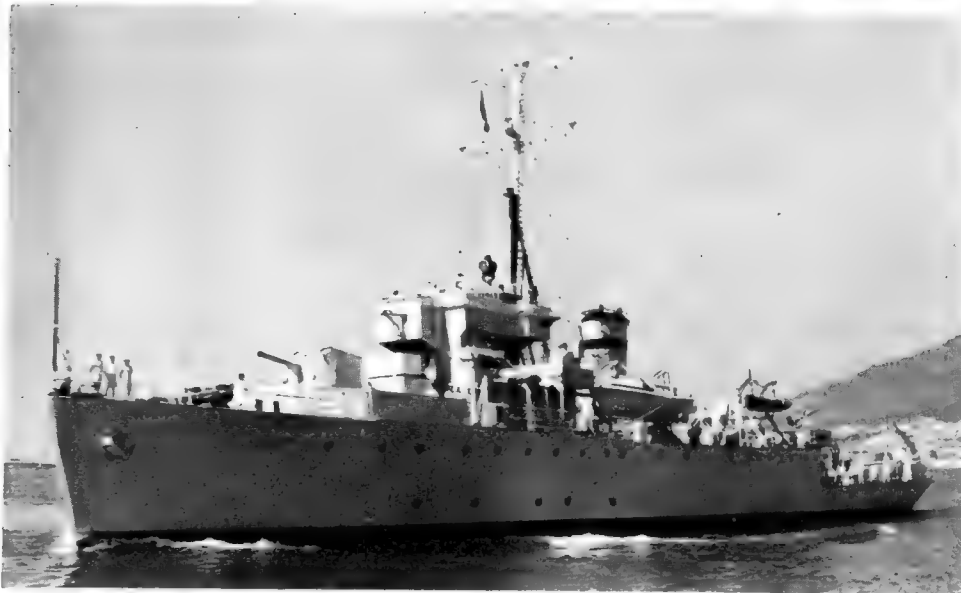
Notes.—Transvaal was completed by Lobnitz & Co., Ltd., Renfrew. All three ships were presented to South Africa by Great Britain. in 1944-45.

Pendant No.	Name	Builders	Laid down	Launched	Completed
F 432	Good Hope	Blyth Dry Docks & S.B. Co., Ltd.	8 Nov. 1943	5 July 1944	1 Dec. 1944
F 10	Natal	Swan Hunter & Wigham Richardson Ltd.	18 Oct. 1943	19 June 1944	8 Mar. 1945
F 602	Transvaal	Harland & Wolff, Ltd., Belfast	20 Jan. 1944	2 Aug. 1944	21 May 1945

Ocean Minesweepers.



1952, R. M. Scott.



BLOEMFONTEIN.

1950, R. M. Scott.

BLOEMFONTEIN (ex-Rosamund)

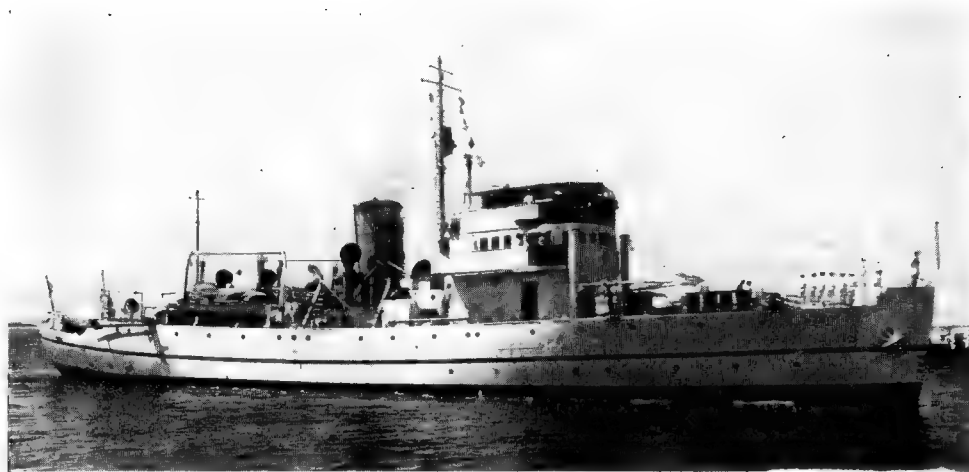
PIETERMARITZBURG (ex-Pelorus)

Displacement: 1,040 and 950 tons (1,330 and 1,250 tons full load) respectively  
Dimensions: 225 (pp.), 235 (o.a.) x 35½ x 11½ (max.) feet  
Guns: 1—4 inch, 8—20 mm. AA.,  
A/S Weapons: 4 D.C.T.  
Machinery: Triple expansion. 2 shafts. I.H.P.: 2,160 = 16 kts.  
Boilers: 2, of 3-drum type  
Complement: 85

Notes.—Purchased by South Africa in 1947. Of "Algerine" class, fastest and most efficient minesweepers in the Royal Navy.

Pendant No.	Name	Builders	Laid down	Launched	Completed
M 439	Bloemfontein	Port Arthur Shipyards	1943	20 Dec. 1944	1945
M 291	Pietermaritzburg	Lobnitz & Co., Ltd., Renfrew	8 Oct. 1942	18 June 1943	7 Oct. 1943

## Surveying Vessel.



Added 1950, R. M. Scott.

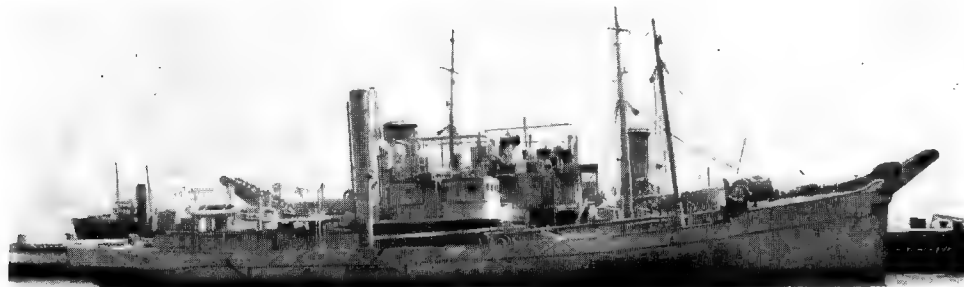
### PROTEA (ex-Rockrose)

Builders: Charles Hill & Sons, Ltd., Bristol  
Laid down: 28 Oct. 1940  
Launched: 26 July 1941  
Completed: 4 Nov. 1941

Displacement: 1,020 tons (1,340 tons full load)  
Dimensions: 190 (pp.), 205 (o.a.) × 33 × 16½ feet  
Guns: 1—4 inch, 1—2 pdr., 1—20 mm. Also carries 4 D.C.T.  
Machinery: Triple expansion. I.H.P.: 2,750 = 16 kts.  
Boilers: 2 S.E.  
Oil fuel: 200 tons  
Complement: 100

Notes.—A former corvette of the "Flower" class. Engined by G. Clark. Formerly served in Royal Navy. Purchased 1947.

## Controlled Minelayer.



1952, S.A.N., Official.

SKILPAD (Fleur and Somerset behind).

### SKILPAD (ex-Spindrif, ex-Polaris)

Displacement: 926 tons full load  
Dimensions: 160 × 26 × 26 feet  
Machinery: Compound Uniflow Lentz valve engines

Notes.—Former German trawler. Name was changed from Spindrif to Skilpad (meaning "Tortoise") in 1951. Sank at her moorings at Durban during gale on night of 22 July 1953, but refloated on 19 Nov. 1953 and is being refitted for service. Pendant No. M447.

## Surveying, Minelaying and Defence Vessels—SOUTH AFRICA Boom Defence Vessels.



SOMERSET.

1942, Official.

### FLEUR (ex-Barbrake)

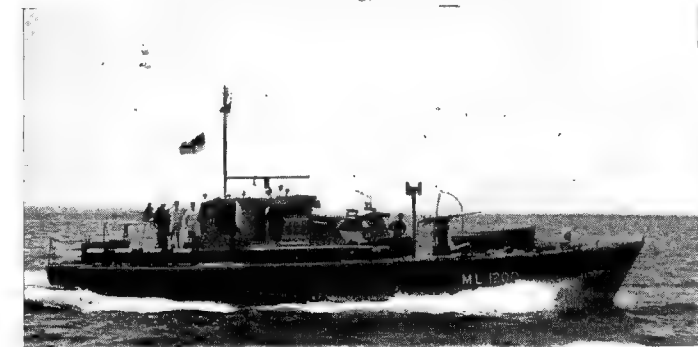
Displacement: 750 tons standard, (960 tons full load)  
Dimensions: 173½ (o.a.) × 32½ × 9½ feet  
Guns: 1—3 inch AA. (war)  
Machinery: Triple expansion. I.H.P.: 850 = 11.75 kts.  
Boilers: 2 S.E.  
Complement: 32

### SOMERSET (ex-Barcross)

Notes.—Engined by Wm. Simons and Swan, Hunter & Wigham Richardson, Ltd., Wallsend-on-Tyne respectively. Transferred from Great Britain. Of same type as "Bar" class in Royal Navy. Stationed at South African Naval Base, Salisbury Island, Durban. Renamed in 1951, Fleur after General de la Rey's horse, and Somerset, the traditionally accepted name for Dick King's horse.

Pendant No.	Name	Builders	Laid down	Launched	Completed
P 273	Fleur	Wm. Simons & Co., Ltd., Renfrew	18 July 1941	29 June 1942	15 July 1942
P 285	Somerset	Blyth Dry Docks & S.B. Co., Ltd.	15 Apr. 1941	21 Oct. 1941	14 Apr. 1942

## Seaward Defence Motor Launches.



SDML 1200

1944, Official.

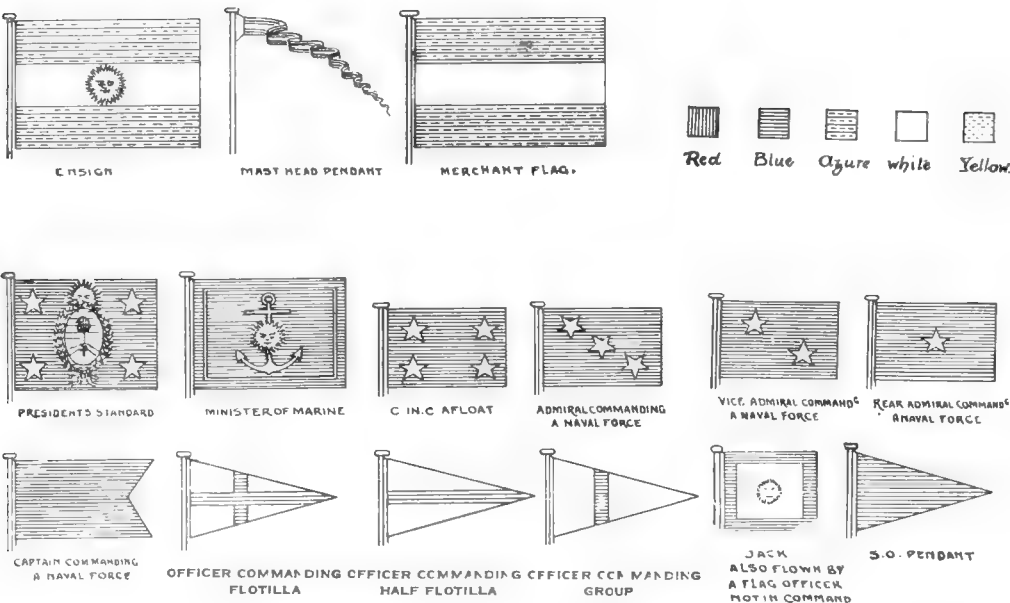
SDML 1197	SDML 1199	SDML 1201	SDML 1203	SDML 1332
SDML 1198	SDML 1200	SDML 1202	SDML 1204	

Displacement: 46 tons (54 tons full load)  
Dimensions: 72 (o.a.) × 15½ × 5½ feet  
Guns: 1—3 pdr., 1—20 mm. AA.  
Machinery: 2 Gardner 8-cylinder Diesels. B.H.P.: 130 = 11 kts.

Notes.—All built in South Africa. SDML 1204 on loan to S.A. Air Force. SDML 1330 and SDML 1331 were stricken off in 1953.

ARGENTINA

Flags.



Flag of Chief of Naval Operations is similar to that of C.-in-C. Afloat but with an additional star in middle.

Administration.

Minister of Defence : General de Ejército Humberto J. Sosa Molina.  
Minister of Marine : Contraalmirante Anibal O. Olivieri.  
Chief of Naval Operations : Almirante Ramon A. Brunet.  
Commander-in-Chief, Sea-going Fleet : Vice-Almirante Jorge P. Ibarborde.  
Director of Navigation : Contraalmirante Guillermo Brown.  
Director General, Administration : Contraalmirante Carlos M. Rivero de Olazabal.

Chief of Naval Commission and Naval Attaché, London : Captain Bernardo F. Benesch.

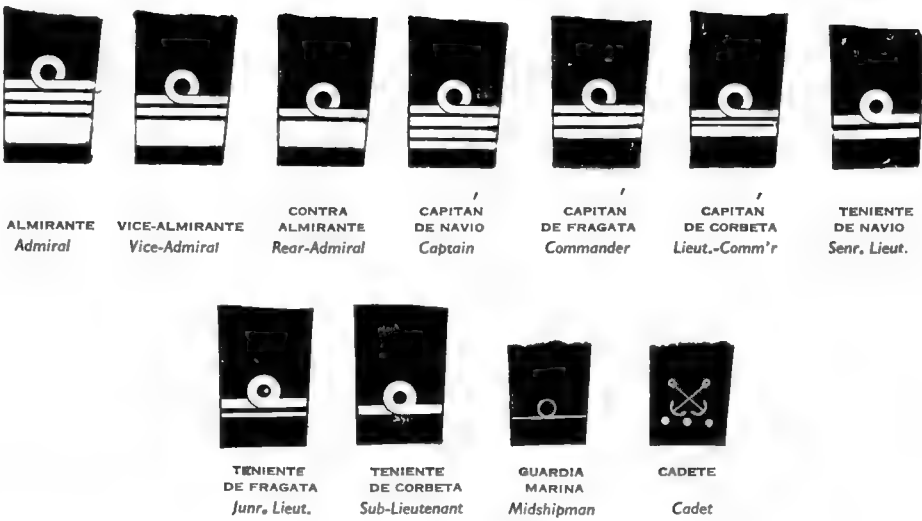
Personnel.

1,500 officers, 20,000 ratings (including 5,000 conscripts).

Ships.

The names of all warships are prefaced by "A.R.A." (Armada Republica Argentina).

Uniforms.



Coloured velvet cloth is worn between the stripes as follows :

Engine Officers :	Azure.
Surgeons :	Red.
Supply Officers :	White.
Judge Advocate :	Green.
Chaplains :	Purple.

Dockyards.

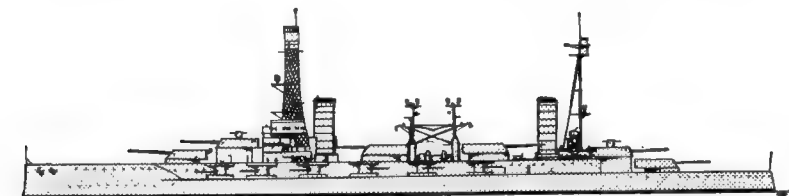
PUERTO BELGRANO (Bahia Blanca). Dry docks : (1) 657 × 84 × 32½ feet ; (2) 683 × 114 × 43 feet.  
Floating dock : 750 tons lift.  
RIO SANTIAGO. Dock: 672 × 114 × 36 feet. Three floating docks: (1) 1,500 tons lift; (2) 750 tons lift.  
(3) 300 tons lift.  
DARSENA NORTE (Buenos Aires). Dry docks : (Eastern) 590½ × 65½ × 25 feet, and (Western) 492 × 65½ × 25 feet.  
ZARATE (River Parana).

Mercantile Marine.

Lloyd's Register appendix, 1954 : 401 vessels of 1,071,272 tons gross.



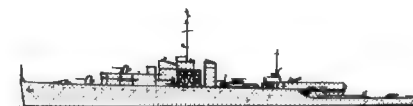
Scale : 150 feet = 1 inch



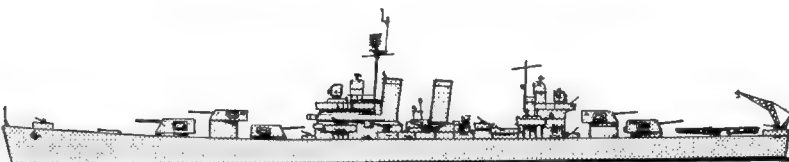
MORENO, RIVADAVIA.



BUENOS AIRES *Class.*



HERCULES.



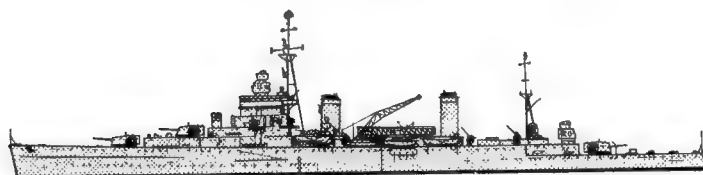
17 DE OCTUBRE, 9 DE JULIO



MENDOZA *Class.*



KING, MURATURE.



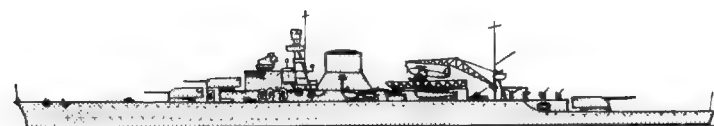
LA ARGENTINA



CERVANTES *Class.*



REPUBLICA



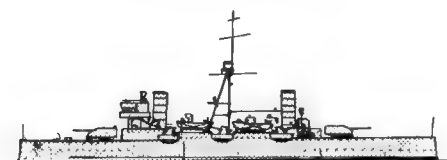
ALMIRANTE BROWN, 25 DE MAYO.



SARANDI, TRINIDAD.



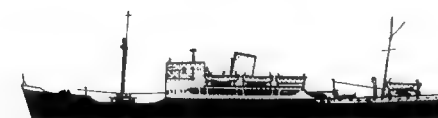
BAHIA AGUIRRE



PUEYRREDON



HEROINA



LE MAIRE *Class.*

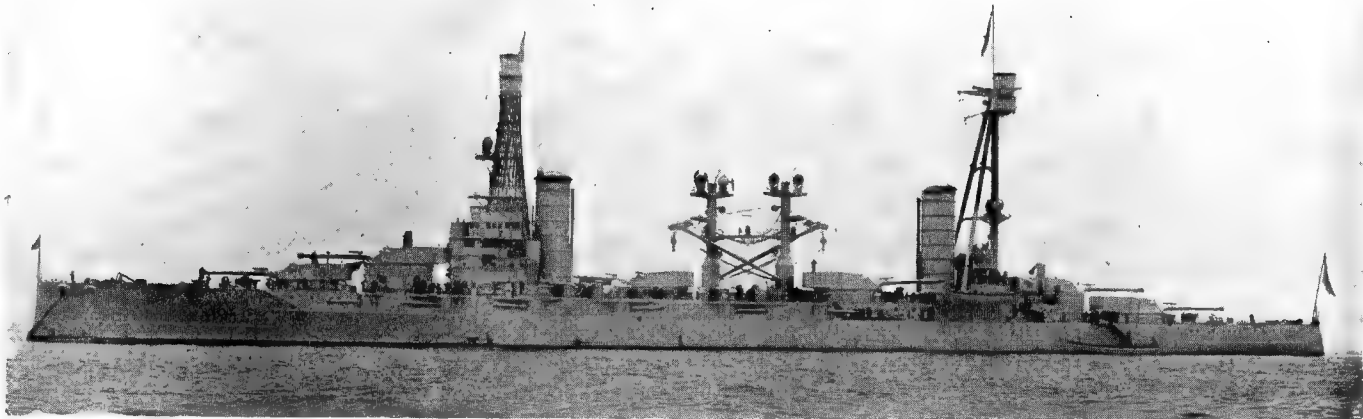
ARGENTINA—Battleships.

2 "Moreno" Class.

MORENO

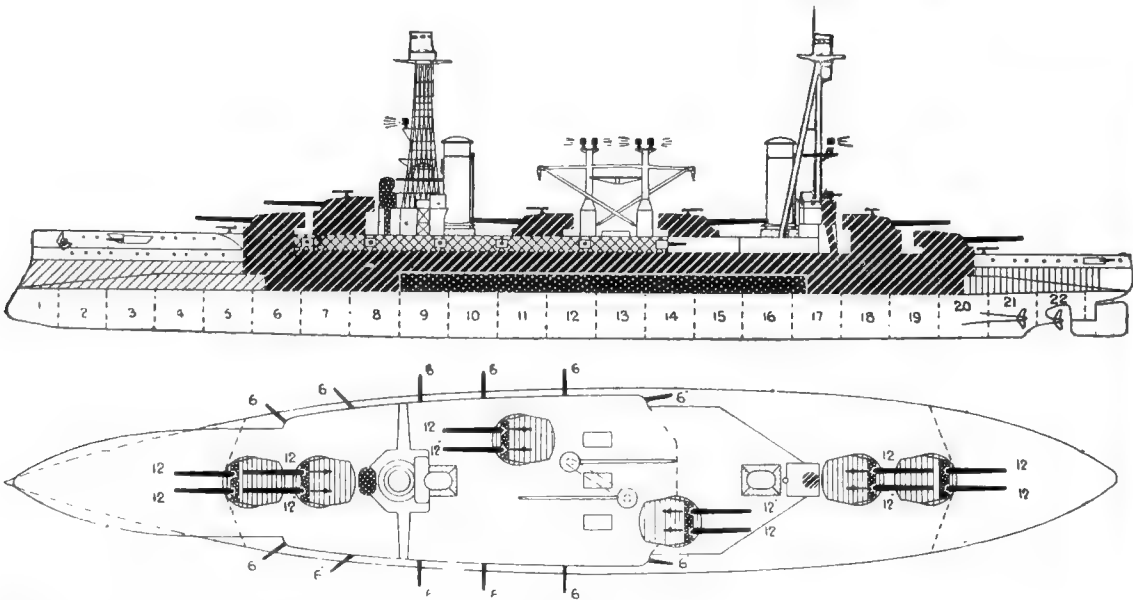
RIVADAVIA

Displacement : 27,720 tons standard (31,000 tons full load)  
Dimensions : Length : 577½ (w.l.), 585 (o.a.) feet. Beam : 97 feet. Draught : 28 feet (max.)  
Guns (Bethlehem) : 12—12 inch, 50 cal., 12—6 inch, 50 cal., 4—3 inch AA., 4—40 mm. AA., 2 M.G.  
Tubes : 2—21 inch (submerged) (broadside)  
Armour (Krupp) : 11"–8" Belt (amidships), 5" Belt (bow) N.C., 4" Belt (stern) N.C. 3" Deck (slopes), 9"–8" Side above belt, 12"–9" Big gun turrets, 6" Secondary battery (N.C.), 12" C.T. (forward), 9" C.T. (aft.) (See armour notes.)  
Machinery : Curtis geared turbines. 3 shafts. S.H.P. : 39,000 = 22.5 kts.  
Boilers : 18 Babcock (converted to oil burning, 1924–25)  
Oil fuel : 3,600 tons  
Nominal radius : 3,930 miles at full speed, 8,500 miles at 10 kts.  
Complement : 1,215



MORENO.

Photo, R. Perkins.



Note to Plan.—3 pdr. guns shown on top of B and X turrets since replaced by rangefinders.

General Notes.—Built under 1908 Programme. Large refits in U.S.A., 1924–25.

Gunnery Notes.—Heights of barbettes over normal draught w.l. : No. 1, 29½ feet ; Nos. 3 and 4 (echelon), and No. 5, 29 feet ; No. 6, 20 feet ; 6 inch guns, 19½ feet above w.l. Arcs of fire : end barbettes, Nos. 1 and 6, 270° ; Nos. 2 and 5 (super-firing), 30° ; Nos. 3 and 4 (echelon) 180° own beam and 100° far beam. Director controls (U.S.) type installed during 1924–25 refits. Rates of fire are reported to be : 12 inch, 2 rounds a minute ; 6 inch, 8 ; 3 inch, 12.

Armour Notes.—Total weight of armour is 7,600 tons. Main belt is 8 feet deep, 4½ feet above water-line and 3½ feet below same at normal draught. It is 240 feet long, but 11" section is only 2 feet deep from top edge of belt, and then tapers to 5" on lower (under-water) edge. Belt under end barbettes is 10" tapering to 5" as main belt. Upper belt 400 feet long, 9" lower edge, 8" top edge, 6" battery above this. Funnel bases, 1½" nickel steel for 15 feet above deck. Protective decks, 1½" upper, 3" lower. Two Director stations behind upper belt at bases of C.T. communication tubes. Barbettes : bases are 9" where exposed. Shields to these : 12" port-plate, 9" sides, 11" back, 3" roof.



MORENO.

Added 1954, Argentine Navy, Official.

Anti-Torpedo Defence.—3" longitudinal wing bulkheads in way of machinery and magazine spaces. ¾" nickel steel flats under magazines, boilers, and engine rooms. Total weight, 690 tons (included in 7,600 tons total weight of armour given above). Searchlights are 38-inch.

Engineering Notes.—On original acceptance trials developed 39,750 S.H.P. and speed of 22.5 kts.

Electrical Engineering Notes.—Electric installation at 220 volts.

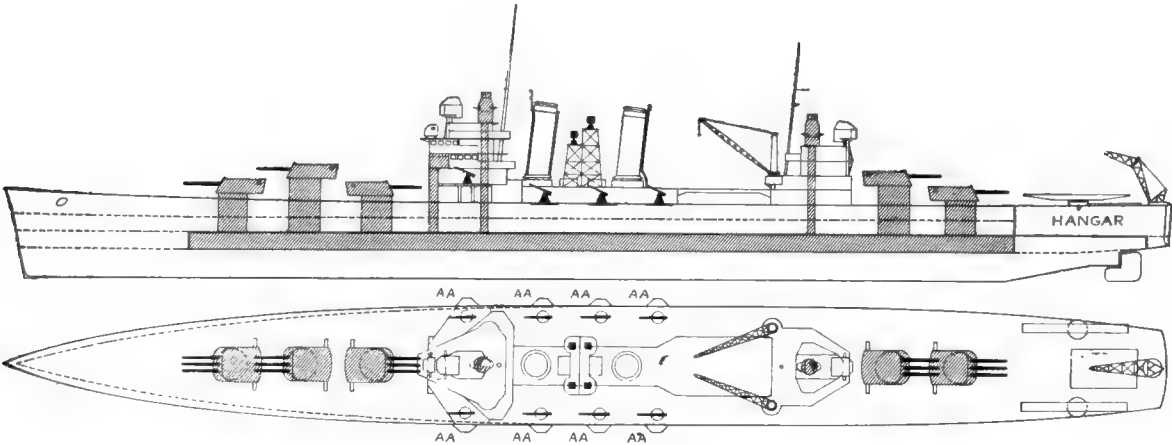
Name	Builders	Machinery	Laid down	Launched	Completed
Rivadavia	Fore River Co.	Fore River Co.	May, 1910	26 Aug., 1911	Dec., 1914
Moreno	N.Y. S.B. Cpn.	Fore River Co.	July, 1910	23 Sept. 1911	Mar., 1915

2 " 17 de Octubre " Class.

17 DE OCTUBRE (ex-Phoenix)

9 DE JULIO (ex-Boise)

Displacement : 10,000 tons standard, 12,500 tons full load  
Dimensions : Length : 608½ (o.a.) feet. Beam : 69 feet. Draught : 24 feet (max.)  
Guns : 15—6 inch, 47 cal. ; 8—5 inch, 25 cal. ; 28—40 mm. AA. ; 24—20 mm. AA  
Aircraft : 4 (normal capacity), could accommodate 6.  
Armour : 4"-1½" belt, 3" + 2" decks, 5"-3" turrets, 8" C.T.  
Machinery : Westinghouse geared turbines. 4 shafts. S.H.P. : 100,000 = 32.5 kts.  
Boilers : 8 Babcock & Wilcox Express type  
Oil fuel : 2,100 tons  
Radius : 14,500 miles at 15 kts.  
Complement : 975



**Note to Plan.**—Superstructure since reduced, bulges added, and beam increased.

**General Notes.**—Formerly CL 46 and CL 47, respectively, of the U.S. " Brooklyn " Class. Purchased from the United States in 1951 at a cost of \$7,800,000, representing 10 per cent. of their original cost (\$37,000,000) plus the expense of reconditioning them. Both transferred to Argentine Navy 12 April, 1951. 17 de Octubre commissioned under her new name at Philadelphia, 17 Oct. 1951 9 de Julio commissioned into the Argentine Navy at Philadelphia, 11 March, 1952.

**Hangar Notes.**—The hangar in the hull right aft could accommodate 6 aircraft if necessary together with engine spares and duplicate parts, though 4 aircraft has been the normal complement. The incorporation of this hangar resulted in a very wide and nearly flat counter and high freeboard aft and also gave the after guns higher command. Above the hangar two catapults were mounted as far outboard as possible, and a revolving crane was placed at the stern extremity overhanging the aircraft hatch.

**Historical Notes.**—9 de Julio refers to 9 July, 1816, when the Argentine provinces signed the Declaration of Independence, as well as to 9 July, 1947, when President Peron declared the economic independence. 17 de Octubre refers to 17 October 1945 when the counter revolution against President Peron was suppressed, a date since instituted as a holiday known as the Day of Loyalty.

Name	Builders	Laid down	Launched	Completed
17 de Octubre	New York S.B. Co., Camden.	15 Apr. 1935	12 Mar. 1938	18 Mar. 1939
9 de Julio	Newport News S.B. Co.	1 Apr. 1935	3 Dec. 1936	1 Feb. 1939



9 DE JULIO.

1954, Argentine Navy, Official.



17 DE OCTUBRE.

Added 1951, U.S. Navy, Official.

ARGENTINA—Cruisers

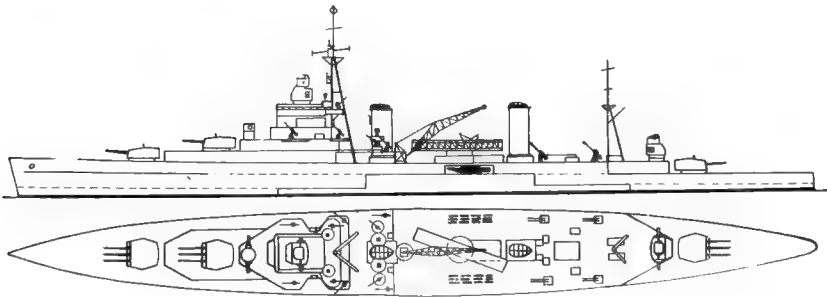
Training Cruiser (Buque Escuela).



1951 ,Wright & Logan.

LA ARGENTINA

- Builders : Vickers-Armstrongs Ltd., Barrow-in-Furness  
Laid down : Jan., 1936.  
Launched : 16 Mar., 1937  
Completed : 31 Jan., 1939
- Displacement : 6,000 tons standard (7,500 tons full load)  
Dimensions : Length : 510 (pp.), 541½ (o.a.) feet. Beam : 56½ feet. Draught : 16½ feet (max.)  
Guns : 9—6 inch, 14—40 mm. AA.  
Tubes : 6—21 inch (tripled)  
Aircraft : 2 Seagull Amphibians with 1 catapult  
Armour : 2" Deck, 2" Gunhouses, 3" side, 3" C.T.  
Machinery : Parsons geared turbines. 3 shafts. S.H.P. : 54,000 = 30 kts.  
Boilers : 4 Yarrow, working pressure 300 lb.  
Oil fuel : 1,500 tons  
Complement : 633 + 131 cadets

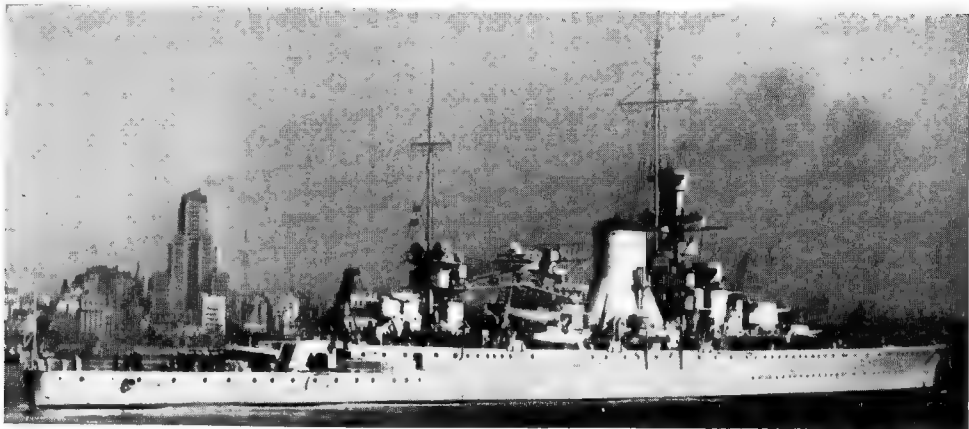


Note to Plan.—Scale : 128 feet = 1 inch.

General Notes—Specially designed as Training Cruiser to replace the old training ship *Presidente Sarmiento*, and named after the Republic. Cost 6,000,000 gold pesos (about £1,750,000).

Gunnery Notes.—Original 4 inch guns were removed in 1950 and 40 mm. guns added.

2 "Almirante Brown" Class.



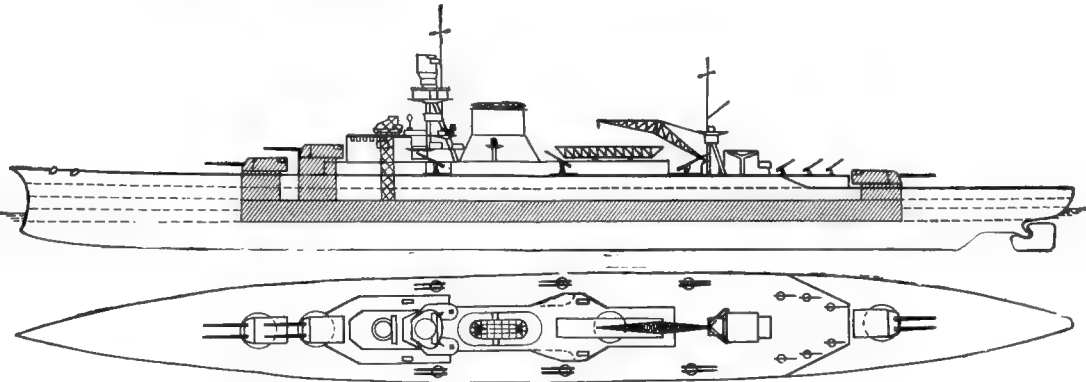
25 DE MAYO.

1946, Argentine Navy, Official.

ALMIRANTE BROWN

25 DE MAYO

- Displacement : 6,800 tons standard (8,600 tons full load)  
Dimensions : Length : 533½ (w.l.), 545½ (o.a.) feet. Beam : 58 feet. Draught : 16½ feet  
Guns : 6—7.5 inch, 52 cal., 12—3.9 inch, 47 cal. AA., 6—40 mm. AA.  
Tubes : 6—21 inch above water (in triple mountings)  
Aircraft : 2 Grumman. Catapult : 1  
Armour : 1" deck, 2" gunhouses, 2½" C.T., 2½" side  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 85,000 = 32 kts.  
Boilers : 6 Yarrow  
Oil fuel : 1,800 tons  
Complement : 600



General Notes.—Cost £1,225,000 each. It is understood that these ships have proved a decided disappointment in service, each evidently having been attempted on the displacement.

Historical Notes.—Admiral William Brown, an Irishman by birth, was in command of the Argentine fleet in the War of Independence, and in the conflict with Brazil, 1826-28. Veinticinco de Mayo (May 25) was the date on which the Argentine Confederation revolted against Spain in 1810.

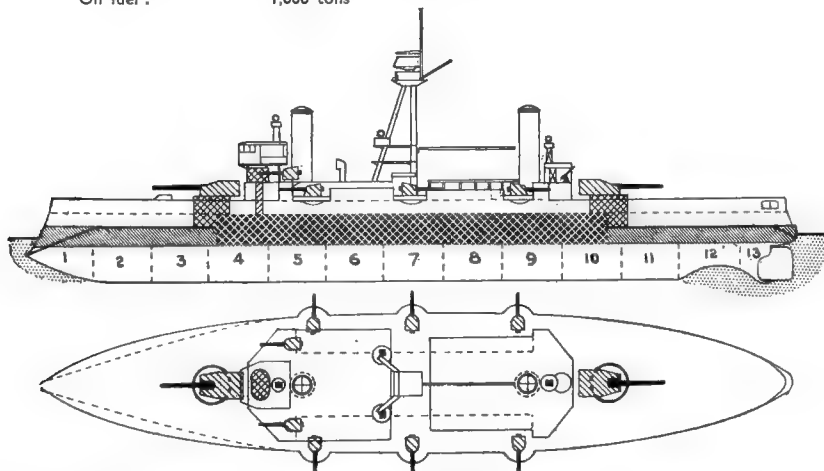
Name	Builders	Laid down	Launched	Completed
Almirante Brown	Odoro, Sestri Ponente	1927	28 Sep. 1929	Sep. 1931
25 de Mayo	Orlando Leghorn	1927	11 Aug. 1929	Sep. 1931

Coast Defence Ship (*Acorazado-Guardacosta*).

1952, Argentine Navy, Official.

**PUEYRREDON** (ex-Giuseppe Garibaldi)

Builders : Ansaldo, Sestri Ponente  
 Launched : 25 Sept., 1897  
 Displacement : 6,100 tons standard  
 Dimensions : Length : 328 feet. Beam : 59½ feet. Draught : 23½ feet (mean)  
 Guns : 2—10 inch, 8—6 inch, 4—6 pdr., 2—37 mm. AA.  
 Armour (Terni) : 6"—3" Belt, 1½" 2" Deck, 6" Battery, Turrets, Barbettes, and C.T.  
 Machinery : Triple expansion. 2 shafts. I.H.P. : 13,000 = 20 kts.  
 Boilers : 8 Yarrow  
 Oil fuel : 1,000 tons



Notes.—This ship was converted to oil fuel and had main deck battery removed, tripod mast fitted and Director firing installed. Refitted at Puerto Belgrano ; now employed as sea-going training ship for naval cadets.

Destroyers (Rated as *Torpederos*).

## 6 "Buenos Aires" Class.



SAN JUAN.

1953, Argentine Navy, Official.



SANTA CRUZ.

1952, Argentine Navy, Official.

**BUENOS AIRES  
ENTRE RIOS****MISIONES  
SANTA CRUZ****SAN JUAN  
SAN LUIS**

Displacement	1,375 tons standard
Dimensions :	312 (pp.), 320 (w.l.), 323 (o.a.), × 33 × 8½ (mean) feet
Guns :	4—4.7 inch, 8—13 mm. AA.
Tubes :	8—21 inch (quadrupled)
Machinery :	Parsons geared turbines. 2 shafts. S.H.P. : 34,000 — 35 kts.
Boilers :	3, of 3-drum type
Oil fuel :	450 tons
Complement :	130

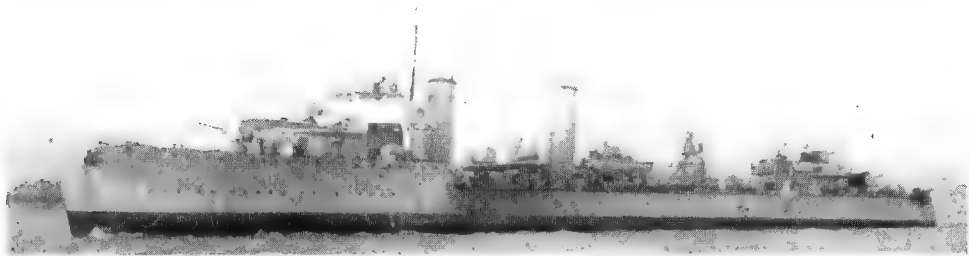
Notes.—All laid down 1936 and completed March-Oct. 1938. Cost approached £400,000 each. *Corrientes*, of this class, was lost by collision with the *Almirante Brown* during exercises on October 3, 1941. Names are those of provinces or territories of the Argentine Republic. Classification of these ships was changed from *Exploradores* to *Torpederos* in 1952.

Pendant Nos.	Name	Builders	Launched
T 6	Buenos Aires	Vickers-Armstrongs, (Barrow)	21 Sep., 1937
T 7	Entre Rios		21 Sep., 1937
T 11	Misiones	Cammell Laird	23 Sep., 1937
T 9	San Juan	Clydebank	24 Jun., 1937
T 10	San Luis	Clydebank	24 Aug., 1937
T 12	Santa Cruz	Cammell Laird	3 Nov. 1937



ARGENTINA—Destroyers and Frigates

Destroyers (Rated as *Torpederos*).

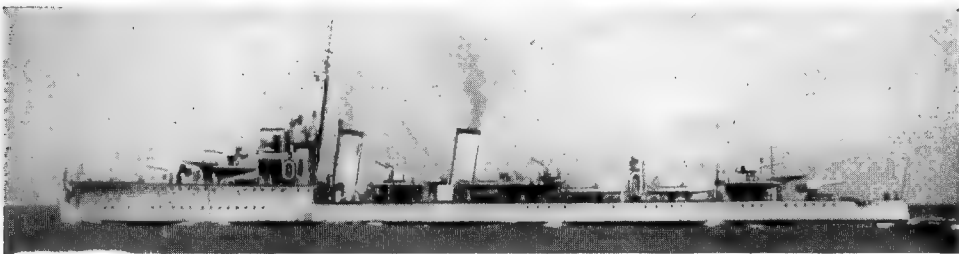


TUCUMÁN. 1952, Argentine Navy, Official.

MENDOZA	LA RIOJA	TUCUMÁN
Displacement : 1,570 tons standard (2,300 tons full load)		
Dimensions : 332½ (w.l.), 335 (o.a.) × 31½ × 12½ feet		
Guns : 4—4.7 inch, Vickers-Armstrongs ; 6—40 mm. AA. Bofors ; 4—40 mm. AA., 4 M.G.		
Tubes : 6—21 inch, in triple deck mountings		
Machinery : 2 sets Parsons single reduction geared turbines. 2 shafts. H.P. : 42,000 = 36 kts.		
Boilers : 4, of 3-drum type, 250 lb. working pressure		
Oil fuel : 540 tons		
Radius of action : 4,500 miles at 14 kts.		
Complement : 160		

Notes.—All laid down in June, 1927, for completion in June, 1929. Named after Argentine provinces. Attained speeds of 39.4 knots on trials. Classification of these ships was changed from *Exploradores* to *Torpederos* in 1952.

Pendant Nos.	Name	Builders	Launched
T 3	Mendoza	J. Samuel White & Co., Ltd., Cowes	18 Jul., 1928
T 4	La Rioja		26 Jan., 1929
T 5	Tucumán		16 Oct., 1928



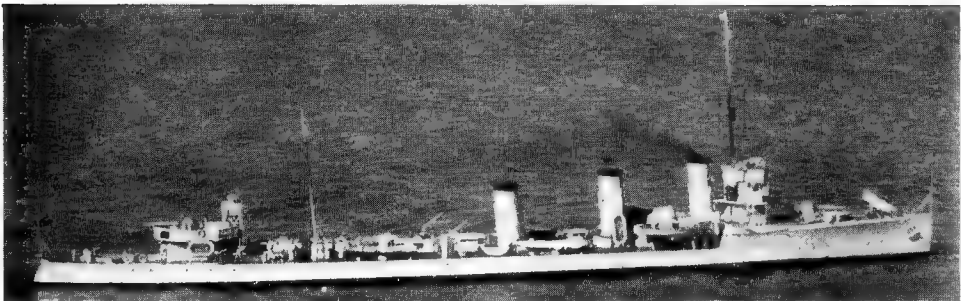
CERVANTES. 1952, Argentine Navy, Official.

CERVANTES (ex-Churrua)	GARAY (ex-Alcalá Galiano)
Displacement : 1,522 tons standard (2,087 tons full load)	
Dimensions : 320 × 31½ × 10½ feet	
Guns : 4—4.7 inch, 1—3 inch AA., 4—40 mm. AA., 4 M.G.	
Tubes : 6—21 inch, in triple deck mountings. 2 D.C. carried.	
Machinery : 2 sets Parsons geared turbines. 2 shafts. S.H.P. : 42,000 = 33 kts. (38 kts. on trials)	
Boilers : 4, of 3-drum type	
Oil fuel : 540 tons	
Radius of action : 4,500 miles at 14 kts.	
Complement : 175	

Notes.—Purchased from Spanish Government in 1927. *Cervantes* is named after the author of "Don Quixote" ; *Garay* (formerly known as *Juan de Garay*) after the Governor of Paraguay who re-founded Buenos Aires in 1580. Classification of these ships was changed from *Exploradores* to *Torpederos* in 1952.

Pendant Nos.	Name	Builders	Launched
T 1	Cervantes	Cadiz	26 June., 1925
T 2	Garay	Cartagena	3 Nov., 1925

Destroyers (Rated as *Torpederos*).



LA PLATA. 1952, Argentine Navy, Official.

CÓRDOBA	LA PLATA
Displacement : 1,000 tons	
Dimensions : 295 × 29½ × 7½ feet	
Guns : 3—4 inch (Beth.), 2—37 mm. AA.	
Tubes : 4—21 inch. 1 D.C.T.	
Machinery : Curtis (A.E.G.) turbines. Designed S.H.P. : 28,000 = 26.5 kt:	
Boilers : 5 Schulz-Thornycroft, altered to burn oil	
Oil fuel : 200 tons	
Endurance : 2,700 miles at 15 kts., 715 miles at full speed	
Complement : 99	

CATAMARCA	JUJUY
Displacement : 997 tons	
Dimensions : 288½ × 28 × 7½ feet	
Guns : 3—4 inch (Beth.), 2—37 mm. AA.	
Tubes : 4—21 inch. 1 D.C.T.	
Machinery : Curtis (A.E.G.) turbines. Designed S.H.P. : 28,000 = 27.2 kts.	
Oil fuel : 220 tons	
Boilers : Schulz-Thornycroft, altered to burn oil	
Endurance : 3,000 miles at 15 kts., 800 miles at full speed	
Complement : 99	

Notes.—Named after Argentine provinces, except *La Plata*, which takes her name from the city. All four have been relegated to harbour service. Classification of these ships was changed from *Destructores* to *Torpederos* in 1952. *Catamarca* and *Jujuy* are similar to *Cordoba* and *La Plata* (see photo).

Pendant Nos.	Name	Builders	Launched
T 13	Catamarca	Germania	Jan., 1911
T 14	Jujuy		Mar., 1911
T 15	Cordoba	Schichau	Nov., 1910
T 16	La Plata		Jan., 1910

Frigates.

2 Improved "King" Class.

AZOPARDO	PIEDRABUENA
Displacement : 1,200 tons (1,400 tons full load)	
Dimensions : 278½ × 31½ × 10½ feet	
Guns : 4—4.1 inch, 4—40 mm. Bofors AA.	
A/S Weapons : 1 Hedgehog, 4 Depth Charge Mortars	
Machinery : 2 Parsons steam turbines. 2 shafts. S.H.P. : 5,000 = 20 kts.	
Boilers : 2 Water tube 3-drum type	

Notes.—Under construction. Laid down at Rio Santiago. When completed these two vessels, together with *King* and *Murature*, will form the Second Frigate Division.

Historical Note.—*Azopardo* is named after Argentine naval hero.

Name	Laid down	Launched	Complete
<i>Azopardo</i>	Nov. 1950	12 Dec. 1953	June 1955
<i>Piedrabuena</i>	Nov. 1950	12 Dec. 1954	June 1956

### Frigates—continued.

#### 2 "King" Class.



KING.

1952, Argentine Navy, Official.

#### KING

Displacement: 1,000 tons standard  
Dimensions: 252½ × 29 × 8½ feet  
Guns: 4—4.1 inch, 4—20 mm.  
Machinery: 2 Werkspoor 4-stroke Diesels, 2 shafts. B.H.P. 2,500 = 16 kts.

#### MURATURE

**Historical Notes.**—Named after Captain John King, an Irish follower of Admiral Brown, who distinguished himself in the war with Brazil, 1826-28; and Captain Murature, who performed conspicuous service against the Paraguayans at the Battle of Cuevas on August 6, 1865.

Pendant No.	Name	Built	Laid down	Launched	Completed
P 21	King	Rio Santiago	1938	1943	28 July, 1946
P 20	Murature	Rio Santiago	1939	July 1945	18 Nov., 1946

#### 3 "Heroína" Class.



HEROINA.

1952, Argentine Navy, Official.

#### HEROINA (ex-U.S.S. Reading)

#### SARANDI (ex-U.S.S. Uniontown, ex-Chattanooga)

#### TRINIDAD (ex-H.M.S. Caicos, ex-Hannam)

Displacement: 1,400 tons (2,100 tons full load)  
Dimensions: 285 (w.l.), 301 (o.a.) × 37½ × 13½ feet  
Guns: 3—4.1 inch (Heroína 2), 2 to 4—47 mm. AA., 6 D.C.T.  
Machinery: Triple expansion. 2 shafts. I.H.P.: 5,500 = 19 kts.  
Boilers: 2, of 3-drum type

**Notes.**—Former United States "Tacoma" Class. These ships bear the names of frigates which saw prominent action during the War of Independence. All welded. Sarandi is fitted as flagship. Heroína has a special deck superstructure aft, housing a meteorological laboratory. Trinidad was formerly known as Santísima Trinidad.

Pendant Nos.	Name	Builders	Launched
P 32	Heroína	Leatham Smith, Superior	28 Aug., 1943
P 33	Sarandi	Leatham Smith, Superior	7 Aug., 1943
P 34	Trinidad	Walsh-Kaiser, Providence	6 Sep., 1943

### Frigates—continued.

#### REPÚBLICA (ex-Smilax)

Builders: Collingwood Shipyards  
Launched: 24 Dec., 1942  
Displacement: 995 tons (1,350 tons full load)  
Dimensions: 208 × 33½ × 16½ feet  
Guns: 1—4.1 inch AA., several smaller  
Machinery: Triple expansion. 1 shaft. I.H.P.: 2,750 = 17 kts. (max.) Oil fuel  
**Notes.**—Former British modified "Flower" class corvette. Bears the name of a corvette which distinguished herself in the War of Independence. Pendant No. P 35.



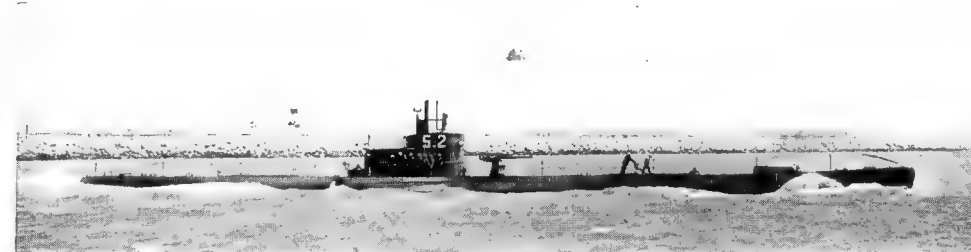
1944, U.S. Navy, Official.

#### HERCULES (ex-U.S.S. Asheville, ex-H.M.C.S. Nadur, ex-H.M.S. Adur)

Builders: Canadian Vickers, Montreal  
Launched: 22 Aug., 1942  
Displacement: 1,445 tons (2,360 tons full load)  
Dimensions: 301½ × 36½ × 13½ feet  
Guns: 3—4.1 inch (105 mm.) d.p., 4—47 mm. AA., 6 D.C.T.  
Machinery: Triple expansion. I.H.P.: 5,500 = 20 kts.  
Boilers: 2 Admiralty 3-drum type  
Complement: 140

**Notes.**—Former United States "Asheville" class, closely duplicating British "River" type. Pendant No. P 31.

### Submarines.



SANTIAGO DEL ESTERO.

Added 1937, Official.

#### SALTA

Displacement: 920 tons surface, 1,175 tons submerged  
Dimensions: 220 (w.l.), 226½ (o.a.) × 21 × 13 feet  
Guns: 1—4 inch, 1—37 mm. AA.  
Tubes: 8—21 inch  
Machinery: 2 Tosi 6-cylinder Diesels. H.P.: 3,000 = 17.5 kts. (surface). B.H.P.: 1,400 = 9 kts. (submerged)

#### SANTA FÉ

#### SANTIAGO DEL ESTERO

**Notes.**—Cavallini type. Ordered Oct., 1927. Named after provinces, and differentiated by numerals painted on conning towers.

Pendant Nos.	Name	Builders	Launched
S 3	Salta	Cantiere Navale	17 Jan., 1932
S 1	Santa Fe	Franco Tosi,	11 Jul., 1931
S 2	Santiago del Estero	Taranto	28 Mar. 1927

ARGENTINA—Minesweepers, M.T.Bs., Surveying Vessels, Training Ship, Repair Ships, etc.

Minesweepers (Rated as *Rastreadores*).



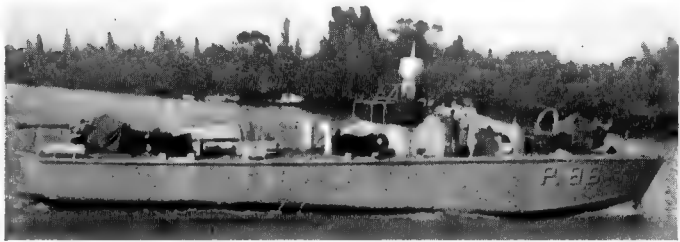
DRUMMOND. 1954, Argentine Navy, Official.

BOUCHARD DRUMMOND	GRANVILLE PARKER	PY ROBINSON	SEAEVER SPIRO
Displacement : 450 tons standard (520 tons full load)	164 (pp.), 193 (o.a.) × 24 × 7 feet (max.)	2—3.9 inch, 47 cal., 2—40 mm. AA., 2 M.G.	2 sets M.A.N. 2-cycle Diesels. B.H.P. : 2,000 = 15 kts.
Guns :	50 tons	3,000 miles at 10 kts.	62
Machinery :			
Oil fuel :			
Radius :			
Complement :			

Notes.—All laid down 1935-37. First Argentine warships built in local shipyards. Named after distinguished naval officers (several of whom were of British extraction).

Pendant Nos.	Name	Builders	Launched
M 7	Bouchard	Rio Santiago Naval Yard	20 Mar. 1936
M 2	Drummond	Rio Santiago Naval Yard	19 June 1936
M 4	Granville	Rio Santiago Naval Yard	27 Jan. 1937
M 11	Parker	Sanchez Shipyard, San Fernando	2 May 1937
M 10	Py	Rio Santiago Naval Yard	30 Mar. 1938
M 3	Robinson	Hansen & Puccini, San Fernando	18 Aug. 1938
M 12	Seaver	Hansen & Puccini, San Fernando	18 Aug. 1938
M 13	Spiro	Rio Santiago Naval Yard	7 June 1937

Motor Torpedo Boats



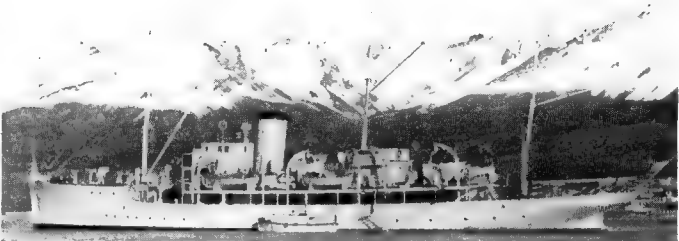
LT 1 LT 2 LT 3 LT 4 LT 5 LT 6 LT 7 LT 8 LT 9

Added 1951, Argentine Navy, Official.

Displacement :	45 tons
Dimensions :	71 × 20 × 4½ feet
Guns :	2—20 mm. AA., 2 M.G.
Torpedo Tubes :	2—21 inch
Machinery :	3 Packard engines. H.P. : 4,500 = 42 kts. (max.)
Complement :	12

Note.—Built in U.S.A. in 1946. Pendant Nos. P 81-P 89.

Surveying Vessels.



BAHIA BLANCA. 1952, Argentine Navy, Official.

BAHIA BLANCA (ex-San Luis)	MADRYN (ex-Comodoro Rivadavia, ex-San Juan)
Displacement : 970 tons	
Dimensions : 195 (o.a.) × 33 × 11 feet	
Machinery : Hawthorn-Werkspoor Diesel. 1 shaft. B.H.P. : 700 = 12 kts.	
Boilers : 1 single-ended Scotch to supply steam to auxiliary machinery	
Oil fuel : 88 tons	
Radius : 4,000 nautical miles	
Complement : 92	

Notes.—Both built Hebburn-on-Tyne. Delivered Feb. 1928. Named after Argentine ports.

No.	Name	Builders	Launched	Completed
Q7	Bahia Blanca	Hawthorn,	26 Oct. 1927	Feb. 1928
Q6	Madryn	Leslie & Co., Ltd.	27 Sep. 1927	Feb. 1928

Training Ship (*Buque Escuela*)



PRESIDENTE SARMIENTO. 1952, Argentine Navy, Official.

Built :	Birkenhead
Launched :	1898
Displacement :	2,850 tons
Dimensions :	251½ × 43½ × 23½ feet
Guns :	3—4.7 inch, 45 cal. ; 1—4 inch, 2—6 pdr., 2—3 pdr.
Machinery :	Compound. I.H.P. : 2,800 = 15 kts.
Boilers :	1 Niclausse, 1 Yarrow, 2 cylindrical single-ended
Coal :	330 tons
Radius :	4,500 miles at 10 kts.
Complement :	294

Notes.—Sheathed and coppered. Built as Training Ship for boys and named after Domingo Faustino Sarmiento, who founded the Naval School after being elected President of the Republic in 1868. Refitted in 1940-41. Three above water torpedo tubes suppressed. Pendant No. Q1.

River Monitors.



PARANÁ. 1952, Argentine Navy, Official.

PARANÁ	ROSARIO
Displacement : 1,055 tons	
Dimensions : 240 × 32½ × 7½ feet	
Guns : 2—6 inch howitzers, 6—3 inch, 4—40 mm. AA., 6 M.G.	
Armour : 3" Belt (amidships), 1½"-1" Deck, 3" Conning tower	
Machinery : Triple expansion. 2 shafts. I.H.P. : 1,600 = 15 kts.	
Boilers : 2 Yarrow	
Coal : 120 tons	
Radius : 2,400 miles nominal at 10.5 kts.	
Complement : 142	

Notes.—Named after cities on the River Paraná, and are remarkable in that their main armament consists of howitzers, 13 calibres in length. Built by Armstrong, launched 28 April and 27 July, 1908, respectively.

Repair Ships (*Buques Taller*).

INGENIERO GADDA (ex-U.S. LST 82)	INGENIERO IRIBAS (ex-U.S. LST 81)
Displacement : 2,125 tons standard (4,100 tons full load)	
Dimensions : 328 × 50 × 16½ feet	
Guns : 8—40 mm., 8—20 mm. AA.	
Machinery : 2 sets Diesels. B.H.P. : 1,800 = 11 kts.	
Fuel : 600 tons	
Complement : 253	

Notes.—Two propellers and two rudders. Fitted as Repair Ships. Rated as Workshop Vessels. Bear the names of two engineers of the Argentine Navy who died on duty. Former U.S. landing ships. (Served in British Navy 1943-46). Pendant Nos. Q22 and Q21.

Rescue Ship (*Buque de Salvamento*)

ALFREZ MACKINLAY
Launched : 1914
Displacement : 700 tons
Dimensions : 193 × 28½ × 13 feet
Machinery : H.P. : 520 = 10 kts.
Fuel : 100 tons

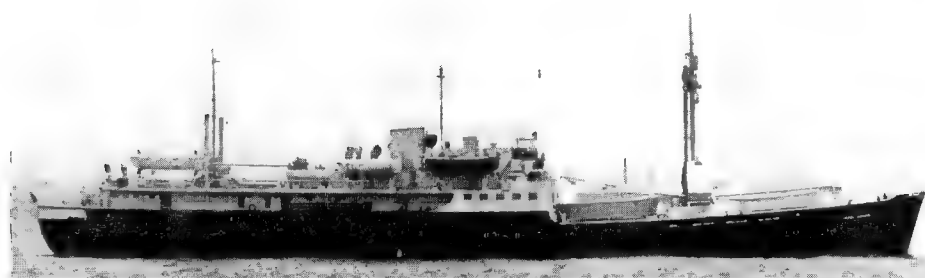
Notes.—Built in Netherlands. Former Surveying Vessel used as Lighthouse Inspection Vessel. Was recently fitted out as a Rescue Ship in the Rio Santiago works. Pendant No. Q11.

Gantry Ship

SAMBA (ex-U.S. LST 1104)
Launched : 17 Jan. 1945
Builders : Missouri Valley B. & I. Co.
Displacement : 1,625 tons light

Notes.—Cargo ship with gantry crane amidships.

Transports (*Transportes*).



BAHIA AGUIRRE

BAHIA AGUIRRE Displacement : 5,000 tons (approx.) Dimensions : 334½ × 46 × 23 feet Machinery : 2 sets Nordberg Diesels. 2 shafts. Oil fuel : 400 tons. Notes.—Built in Canada. Bahia Buen Suecesco completed at Halifax, Nova Scotia, June, 1950. Pendant Nos. B 2, B 6 and B 8, respectively

BAHIA BUEN SUECESCO

BAHIA THETIS

1952, Argentine Navy, Official.



LE MAIRE.

LA PATAIA

LE MAIRE

Displacement : 6,100 tons (approx.) Dimensions : 335½ × 50½ × 30½ feet Machinery : 2 sets Diesels. 2 shafts. Oil fuel : 400 tons

LES ECLAIREURS

Notes.—Built in Italy (CRDA). Laid down 12 April 1948 (Le Maire 25 April), launched 25 June, 22 Oct. and 30 March, 1949, respectively and all completed June 1950, being delivered 2 Oct. 1951. Pendant Nos. B 10, B 11 and B 9, respectively.

SAN JULIAN (ex-FS 281)

Builders : Wheeler Shipbuilding Corp. Launched : 1944 Displacement : 930 tons Dimensions : 176 × 32½ × 11 feet Machinery : 2 sets Diesels. 2 shafts. B.H.P. : 1,000 = 10 kts.

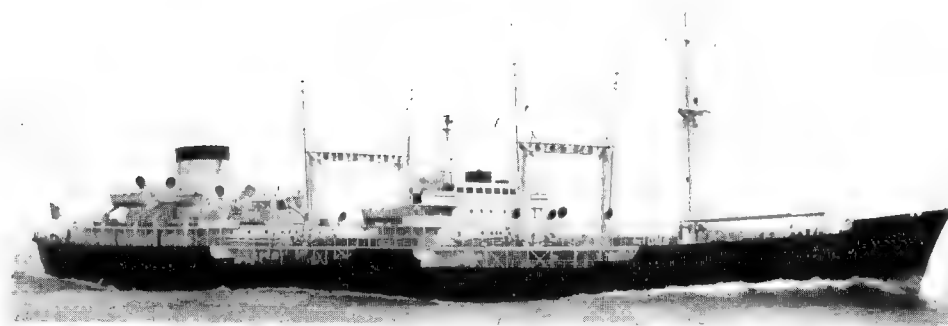
Notes.—Ex-U.S. Army small cargo carrier. Pendant No. B 7.

USHUAIA

Built : Rio Santiago Launched : 1939 Displacement : 1,275 tons full load Dimensions : 211 × 31½ × 11½ feet Machinery : 2 sets Diesels. 2 shafts. B.H.P. : 1,200 = 12 kts. Oil fuel : 100 tons

Notes.—Named after the capital of the territory of Tierra del Fuego. Pendant No. B 4.

Oilers (*Buques Tanques*).



PUNTA MEDANOS

1951, Photo, courtesy Swan, Hunter & Wigham Richardson.

Builders : Swan, Hunter & Wigham Richardson Ltd., Wallsend-on-Tyne Launched : 20 Feb., 1950 Completed : 10 Oct., 1950 Measurement : 8,250 tons deadweight Dimensions : 470 × 62 × 35 (depth) feet Machinery : Double reduction geared turbines. 2 shafts. Boilers : 2 Babcock & Wilcox two-drum integral furnace water-tube units. Speed : Over 19 kts. obtained on trials.

Notes.—In her equipment this ship, which is a unit of the Argentine Navy and is available as a training vessel for personnel, may be regarded as the embodiment of the experience in the latest fleet oilers, and is said to be the finest and fastest of her type afloat. Fitted for fuelling warships at sea. Boilers built under licence by the Wallsend Slipway & Engineering Company. Steam conditions of 400 lb. per sq. in. pressure and 750 temperature. Pendant No. B 18.



PUNTA LOYOLA

1954, U.S.Navy, Official.

PUNTA DELGADA (ex-Sugarland, ex-Nanticoke AOG 66) PUNTA LOYOLA (ex-Capitan, ex-Klickitat, AOG, 64)

PUNTA NINFAS (ex-Black Bayou, ex-Michigamme, AOG 65)

Displacement : 6,000 tons Dimensions : 325 × 48½ × 19 feet Machinery : Westinghouse Diesel. 1 shaft. B.H.P. : 1,400 = 10.5 kts. Complement : 92

Notes.—Bear names of geographical locations. All U.S.M.S. type TI-M-BT1. All built by St. John's River S.B. Co. Launched 7 Apr. 24 Mar. and 31 Mar. 1945, respectively.

## ARGENTINA—Oilers, Landing Craft and Tugs.

### Oilers (Rated as Transportes).

#### PUNTA CIGUEÑA (ex-Sulphur Bluff) PUNTA RASA (ex-Salt Creek)

Displacement : 2,200 tons  
Dimensions : 221 × 37 × — feet  
Machinery : Diesel. 1 shaft. B.H.P. : 800 = 10 kts.

Notes.—Commissioned in 1947. Named after capes. U.S. M.C. type TI-M-A2

No.	Name	Builders	Launched	Completed
B 13	Punta Cigueña	Todd Galveston Drydocks Inc.	1944	Mar. 1944
B 14	Punta Rasa	Barnes Duluth S.B. Co.	1943	1943

#### PUNTA ALTA

Builders : Puerto Belgrano  
Launched : 1937  
Displacement : 1,600 tons  
Dimensions : 200 × 33½ × 11½ feet  
Deadweight capacity : 800 tons

Note.—Named after a headland.

### Tank Landing Ships.



1951, Argentine Navy, Official.

BDT 1	BDT 3	BDT 5	BDT 7	BDT 9	BDT 11
BDT 2	BDT 4	BDT 6	BDT 8	BDT 10	

Displacement : 2,366 tons (beaching), 4,080 tons (full load)  
Dimensions : 316 (w.l.), 328 (o.a.) × 50 × 11½ (14 max.) feet  
Machinery : 2 sets Diesels. Two screws B.H.P. : 1,700 = 11 kts.

Notes.—Ex-United States LST's 875, 995, 998, 872, 801, 919, 994, 869, 1057, 1044, 1108  
Built by Puget Sound Bridge and Dredging Co., Seattle, U.S.A. Launched 1944. Have two rudders. BDT 1 to 6 Pendant Nos. Q 41 to 46. BDT 7 to 11 named Dona Elora, Dona Stella, Dona Dorothea, Dona Barbara, Dona Irma.

### Medium Landing Ships.



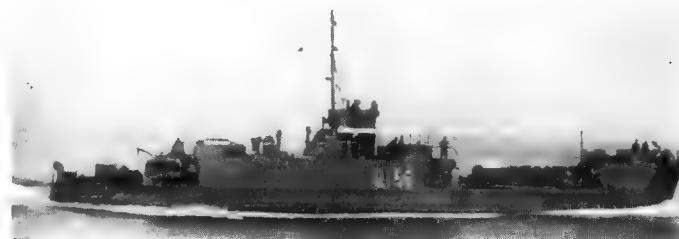
1951, Argentine Navy, Official.

BDM 2	BDM 2
BDM 1	

Displacement : 743 tons (beaching), 1,095 tons (full load)  
Dimensions : 196½ (w.l.), 203½ (o.a.) × 33½ × 8 feet  
Machinery : 2 sets Diesels. 2 shafts. B.H.P. : 2,800 = 12½ kts

Notes.—Former American LSM's. 267 and 86, respectively. Pendant Nos. Q 69 and Q 70.

### Infantry Landing Craft. (Buques Desembarco Infanteria).



1952, Argentine Navy, Official.

BDI 1 (Q.64)	BDI 4 (Q.67)	BDI 7 (Q.60)	BDI 10 (Q.63)	BDI 13 (Q.55)
BDI 2 (Q.65)	BDI 5 (Q.58)	BDI 8 (Q.61)	BDI 11 (Q.56)	BDI 14 (Q.54)
BDI 3 (Q.66)	BDI 6 (Q.59)	BDI 9 (Q.62)	BDI 12 (Q.57)	BDI 15 (Q.68)

Displacement : 387 tons (full load)  
Dimensions : 153 (w.l.), 159 (o.a.) × 23½ × 5 feet  
Machinery : 8 sets Diesels. B.H.P. : 2,320 = 14½ kts. Two reversible propellers

Notes.—Ex-American LCLI's 583, 1067, 564, 606, 750, 746, 748, 734, 581, 688, 737, 753, 1018, 1060, 689.

### Personnel and Vehicle Landing Craft.

EDPV 1	EDPV 7	EDPV 13	EDPV 18
EDPV 2	EDPV 8	EDPV 14	EDPV 19
EDPV 3	EDPV 9	EDPV 15	EDPV 20
EDPV 4	EDPV 10	EDPV 16	EDPV 21
EDPV 5	EDPV 11	EDPV 17	EDPV 22
EDPV 6	EDPV 12		

Displacement : 12 tons  
Dimensions : 35½ × 12 × 3½ feet

Note.—Ex-American LCVP's.

### Tugs (Remolcadores).

#### PEHUENCHE TONOCOTE

Notes.—Pehuenche under construction in Rio Santiago. Tonocote commissioned for service in Sept. 1950.



1949, Argentine Navy, Official.

GUARANI.	GUARANI
CHARRUA (ex-U.S. Army LT-224)	(ex-U.S. Army LT-817)

Builders : Marietta Manufacturing Co. U.S.A.  
Displacement : 982 tons  
Dimensions : 143 × 34 × 18 feet  
Machinery : Unaflo steam engine. shaft. H.P. : 1,200 = 12 kts.  
Oil fuel

### Tugs—continued.



CHIRIGUANO.

1949, Argentine Navy, Official.

CHIRIGUANO (ex-U.S. ATA 227)  
DIAGUITA (ex-U.S. ATA 124)

SANAVIRON (ex-U.S. ATA 228)  
YAMANA (ex-U.S. ATA 126)

Builders : Levingstone Shipbuilding Co., Orange, Texas, U.S.A.  
Launched : 1947

Displacement : 689 tons  
Dimensions : 133½ (w.l.), 143 (o.a.) × 34 × 15 feet  
Machinery : Diesel-electric. B.H.P. : 925 = 11.5 kts.

Note.—All six of above ships bear names of South American Indian tribes.



MATACO.

1951, Argentine Navy, Official.

#### MATACO

#### TOBA

Measurement : 339 tons gross  
Dimensions : 130½ (pp.), 137 (w.l.) × 28½ × 13½ feet  
Machinery : Triple expansion. I.H.P. : 1,100 = 12 kts. 2 screws.  
Oil fuel.

Name	Builders	Launched	Completed
Mataco	Hawthorn	24 Jan., 1928	Mar., 1928
Toba	Leslie	23 Dec., 1927	Mar., 1928

#### ONA

#### QUERANDI

Builders : Thornycroft  
Launched : 1913

Displacement : 615 tons  
Measurement : 345 tons gross  
Dimensions : 130 × 28 × 12 feet  
Machinery : Triple expansion. I.H.P. : 1,200 = 12 kts.



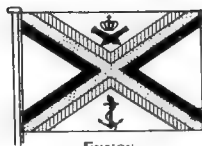
# BELGIUM

## Flags.

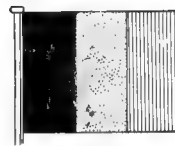


ROYAL STANDARD.

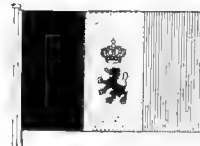
Note—Field is reddish purple



ENSIGN



NATIONAL.



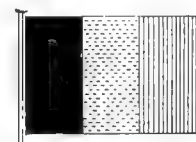
MARINE DE L'ETAT



JACK



PENDANT



MERCANTILE MARINE



Black

Yellow

Red

## Administration.

- The Marine Militaire (Force Navale) is attached to the Ministry of National Defence.
- The Marine de l'Etat (State Marine) is dependant of Ministry of Communcations, Marine Administration.
- The Marine Marchande (Mercantile Marine)
- The Air-Sea Rescue Service is the responsibility of the Air Force.

Minister of Defence : General E. Degreef.

Chief of Naval Staff : Commodore L. J. J. Robins, A.D.C.

Military Attaché in London : Lt.-Col. E. Delelienne.

## Personnel.

3,000 officers and men.

## Uniforms.



Commodore

Commodore



Capitaine  
de  
Vaisseau

Captain



Capitaine  
de  
Fregate

Commander



Capitaine  
de  
Corvette

Lieutenant-  
Commander



Lieutenant  
de  
Vaisseau  
de  
1<sup>re</sup> Classe  
Lieutenant  
(Senior)



Lieutenant  
de  
Vaisseau

Lieutenant



Enseigne  
de  
Vaisseau

Sub-  
Lieutenant  
(Senior)



Aspirant  
de  
Marine

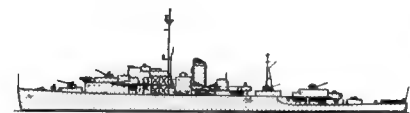
Sub-  
Lieutenant

## New Programme.

2 Ocean Minesweepers.  
16 Inshore Minesweepers.

## Silhouettes.

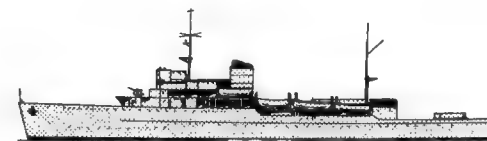
\* Scale : 150 feet = 1 inch.



VICTOR BILLET.\*



A. DE GERLACHE Class\*



KAMINA\*



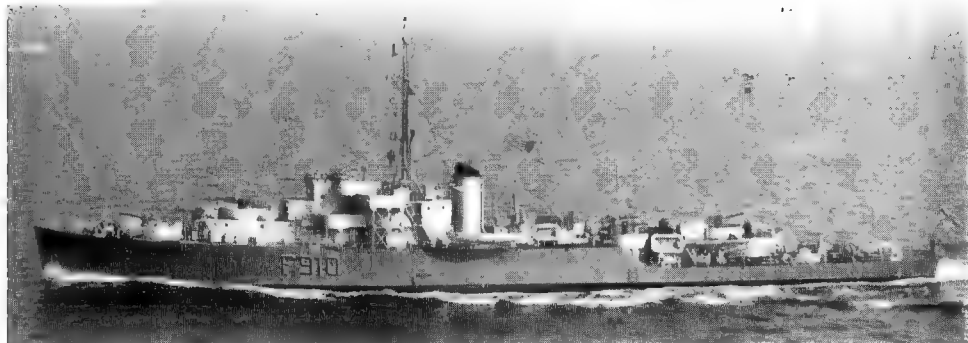
ARTEVELDE.

## Mercantile Marine.

Lloyd's Register appendix, 1954 : 202 vessels of 483,507 tons gross.

BELGIUM—Frigate and Ocean Minesweepers

Frigate (Frégate)



LUITENANT TER ZEE VICTOR BILLET.

1953, Skyfotos.



LUITENANT TER ZEE VICTOR BILLET.

1952, Official.

LUITENANT TER ZEE VICTOR BILLET (ex-U.S.S. Sheboygan)

Builders :	Globe S.B.Co., Superior, Wis.
Laid down :	17 Apr. 1943
Launched :	31 July 1943
Completed :	14 Oct. 1944
Displacement :	1,430 tons (2,100 tons full load)
Dimensions :	285½ (w.l.), 304 (o.a.) × 37½ × 13½ feet
Guns :	3—3 inch, 50 cal., 6—40 mm. AA., 2—20 mm. AA.
Machinery :	Triple expansion, 2 shafts. I.H.P. : 5,500 = 20 kts.
Boilers :	2, of 3-drum type
Oil fuel :	650 tons
Radius :	7,500 miles at 12 kts.
Complement :	142

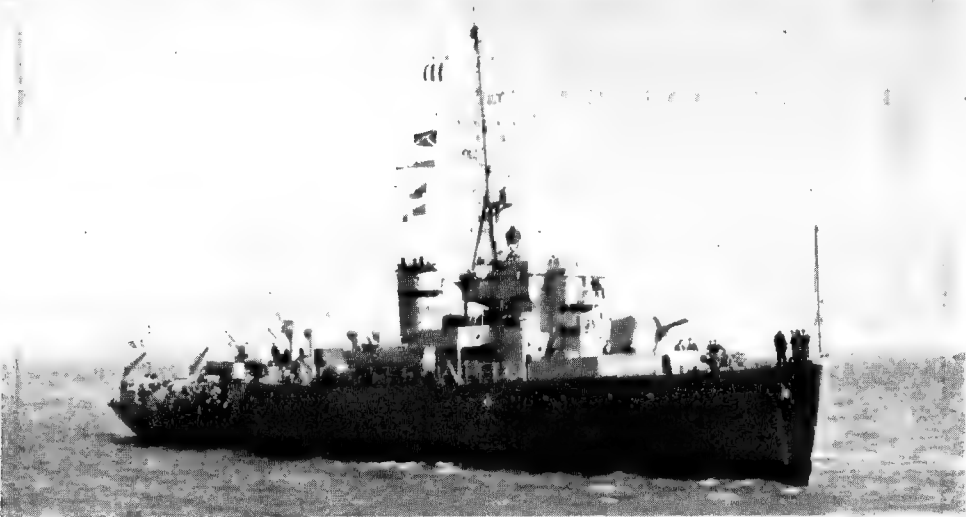
Notes.—Former United States patrol frigate of "Tacoma" class, PF 57. Purchased and transferred in 1947. The design closely resembles that of British "River" class frigates. All welded hull. Named after a Belgian naval officer who died gallantly in the Dieppe raid Aug. 19, 1942. Formerly Belgian weather observation ship, but left Meteorological Service June 1950. Employed as fishery protection vessel (garde pêche) and training ship (navier-ecole) Pendant No. F 910.

Ocean Minesweepers (Dragueurs-océaniques)



A. F. DUFOUR.

1953, A. & J. Pavia.



ADRIEN DE GERLACHE.

1952, Official

<b>ADRIEN DE GERLACHE</b> (ex-Liberty)		<b>DE BROUWER</b> (ex-Spanker)		<b>GEORGES LECOINTE</b> (ex-Cadmus)	
<b>A. F. DUFOUR</b> (ex-Fancy)		<b>DE MOOR</b> (ex-Rosario)		<b>JAN VAN HAVEBEKE</b> (ex-Ready)	
		Displacement :		1,040 tons (1,335 tons full load)	
		Dimensions :		225 (pp.), 235 (o.a.) × 35½ × 11½ (max.) feet	
		Guns :		1—4 inch, 4—40 mm. AA.	
		Machinery :		Geared turbines, 2 shafts. S.H.P. : 2,000 = 16·5 kts.	
		Boilers :		2, of 3-drum type	
		Complement :		105	
Notes.—Formerly of the fastest and most efficient class of minesweepers in the British Navy, frequently used as escort vessels built by Harland and Wolff, except Dufour by Blyth S.B. & D.D. Co. Radius: 4,000 miles.					
Pendant No.	Name	Begun	Launched	Completed	Transferred
M 900	Adrien de Gerlache	27 Nov. 1943	22 Aug. 1944	18 Jan. 1945	29 Nov. 1949
M 903	A. F. Dufour	22 July 1942	5 Apr. 1943	21 Nov. 1943	Aug. 1951
M 904	de Brouwer	22 Sep. 1942	20 Apr. 1943	9 July 1943	25 Feb. 1953
M 905	de Moor	22 Sep. 1942	3 Apr. 1943	20 Aug. 1943	13 Jan. 1953
M 901	Georges Lecoite	21 July 1941	27 May 1942	9 Sep. 1942	31 June 1950
M 902	Jan Van Havebeke	14 Apr. 1942	11 Jan. 1943	21 May 1943	4 July 1951

Coastal Minesweepers (*Dragueurs côtiers*)

28 New Constructions  
16+8 U.S. AMS Type 60



M 910

1954, Official.

M 910	M 914	M 918	M 922	M 926	M 930
M 911	M 915	M 919	M 923	M 927	M 931
M 912	M 916	M 920	M 924	M 928	M 932
M 913	M 917	M 921	M 925	M 929	M 933

Displacement : 370 tons (full load)  
Dimensions : 138 (p.p.), 144 (o.a.) × 26½ × 8 feet  
Guns : 2—20 mm. (twin mount)  
Machinery : Diesel. Speed : 14 kts.  
Complement : 40

Notes.—Auxiliary motor minesweepers of wooden construction. New type of vessel constructed throughout of material with the lowest possible magnetic attraction to attain the greatest possible safety factor when sweeping for magnetic mines. 16 built in U.S.A. under MDAP, U.S. hull-numbers AMS 63-65, 77, 78, 101-104, 148-154, and 8 of same type building in Belgium under MDAP with machinery and armament from U.S.A. Also AMS 169 turned over 27 Feb. 1954 at New York Naval Shipyard, Brooklyn.

The motor minesweepers M 947 (ex-MMS 1020) and M 940-946 (ex-MMS 182, 187, 188, 189, 191, 193 and 266) on loan from Great Britain since 1944 have been returned to the Royal Navy.

## Patrol Craft.

2 U.S. PC Type

Notes.—Two patrol craft of U.S. PC design building in U.S. for Belgium under MDAP.

## Air Sea Rescue Launches.

V 01 (ex-V 2592)

V 02 (ex-V 2651)

Note.—Belong to Force Aérienne for Air Sea Rescue Service.

## Naval Auxiliary Transport.



1952, Official

KAMINA (ex-Royal Harold, ex-Hermann von Wissmann)

Displacement : 3,840 tons standard (5,750 tons full load)  
Dimensions : 374 × 49½ × 18½ feet  
Guns : 2—3 inch, 4—40 mm. AA., 5—20 mm. AA.  
Machinery : Diesel. B.H.P. : 3,600 = 15 kts. (cruising)  
Radius : 10,000 miles  
Complement : 168

Notes.—Troop capacity 650. Built in 1940 at Hoboken, Antwerp by J. Cockerill for Poland. Seized by Germans and used as support ship for U-boats in Norway. Transferred to Britain 1945, and finally given to Belgium in Oct. 1950. Pendant No. AP 907.

## Depot Ship.

ARTEVELDE (ex-K4, ex-Lorelei, ex-Artevelde)

Displacement : 1,640 tons (2,270 tons full load)  
Dimensions : 292 (pp.), 323 (o.a.) × 34½ × 12 feet  
Machinery : Parsons-Rateau geared turbines. 2 shafts. S.H.P. : 30,000 = 30 kts. (designed). Speed now something like 8 kts.  
Boilers : 2 Babcock & Wilcox

Notes.—Laid down at the Cockerill Yard at Antwerp in 1939, seized by the Germans in 1940, and completed by Wilton-Fijenoord, but was recovered at Cuxhaven after the war, and has been converted into a depot ship and training ship for engine room ratings immobilized due to engines being damaged in 1945, and so far not yet repaired.

## River Patrol Boats.

LEIE      MEUSE      Sambre      SCHELDE      SEMOIS      YSER

Displacement : 27 tons  
Length : 62 feet  
Guns : 1—20 mm.  
Machinery : Diesels. B.H.P. : 400 = 19 kts.

Notes.—Built at the Theodor Shipyards of Regensburg, Germany. These six patrol boats constitute the Belgian Rhine Squadron at Nieh I

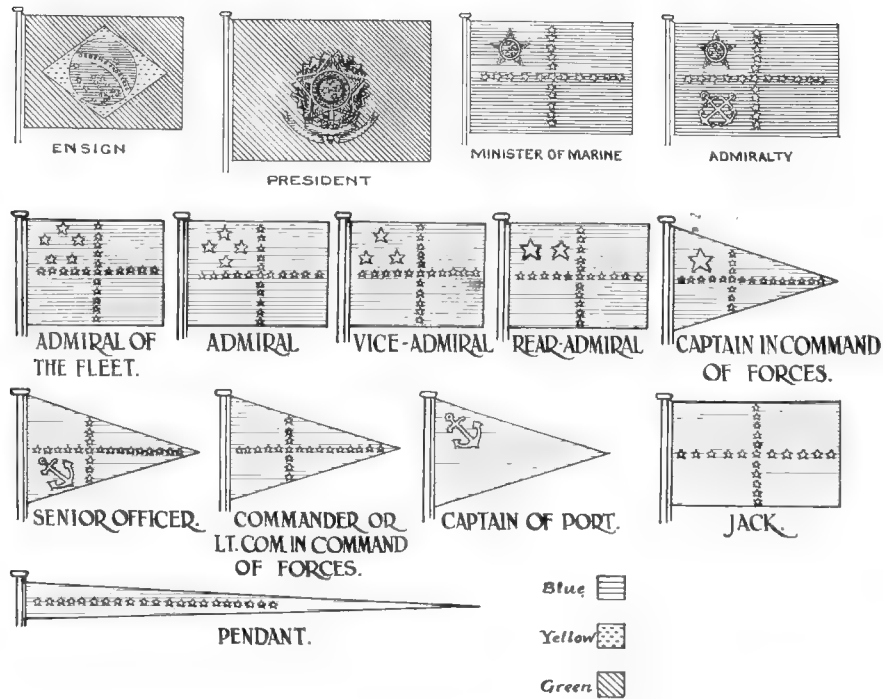
## Seagoing Motor Tug.

SUB-LIEUTENANT VALKE

Displacement : 110 tons  
Dimensions : 81 (p.p.), 93 (o.a.) × 21 × 9 feet  
Machinery : Diesels. B.H.P. : 600 = 12.5 kts.  
Complement : 28

Notes.—Built in Haarlem, Netherlands, 1951. Pendant No. A 950.

Flags.



Administration.

Minister of Marine : Vice-Almirante Renato Guillobel.

Chief of Naval Staff : Almirante de Esquadra Attila Monteiro Aché.

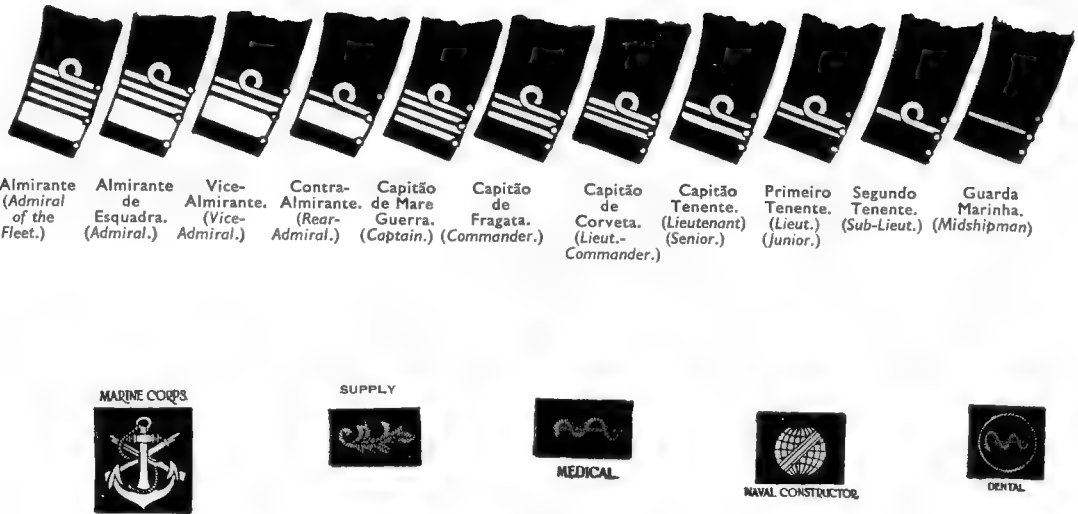
Naval Attaché in London : Captain Carlos Paraguassú de Sá.

Personnel.

1,300 officers, 25,000 men (including 4,000 marines).

BRAZIL  
(BRASIL)

Uniforms.



Highest rank in the Brazilian Navy is that of *Almirante*, with four thick stripes above the broad band, corresponding to British *Admiral of the Fleet*, but the rank is not held in peace-time.

*Non-executive officers* wear no curl, but have badges of branch above top stripe as above.  
*Marine Corps officers* wear distinctive uniforms, but ranks and stripes correspond with those of the Navy.  
*Naval Constructors* wear both curl and badge of branch.  
*Supply Officers* and *Accountants* merged into one branch in 1952, and the Accountant badge was suppressed.

*Caps* : Similar to those of British Navy.

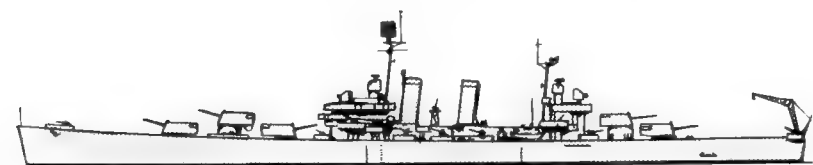
New Construction Programme.

In 1952 Brazil placed orders with Japan for the construction of 2 armed troop transports of 4,200 tons, and with the Netherlands for the construction of 10 corvettes of 911 tons, 6 transports and 6 tugs.

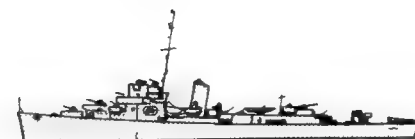
Mercantile Marine.

Lloyd's Register appendix, 1954 :  
395 vessels of 857,391 tons gross.

Scale: 150 feet = 1 inch



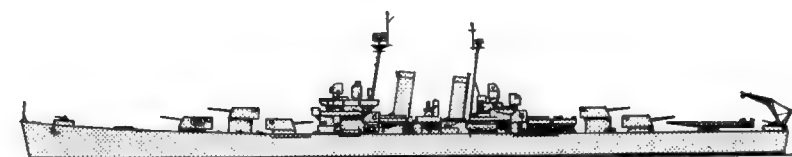
BARROSO



BAURU Class.



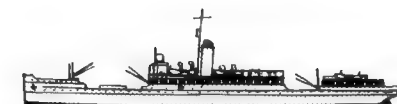
RIO BRANCO.



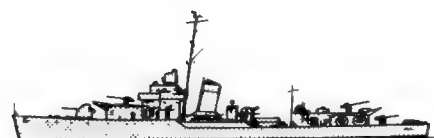
TAMANDARÉ



CARIOCA Class.



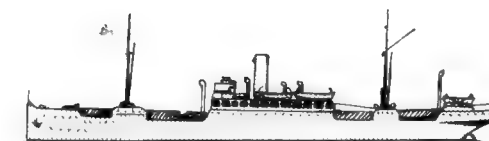
ALMIRANTE FRONTIN.



AMAZONAS Class.



BARRETO MENEZES Class.



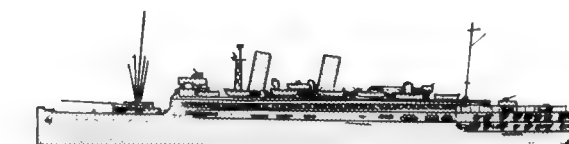
BELMONTE



MARCILIO DIAS Class.



GUAPORE Class.



DUQUE DE CAXIAS



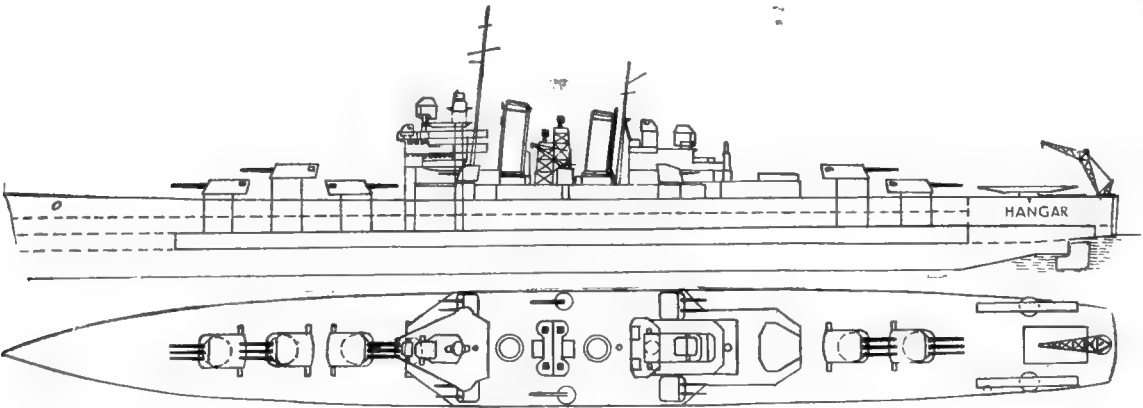
BRAZIL—Cruisers

2 “Almirante” Class.

BARROSO (ex-Philadelphia)

TAMANDARÉ (ex-St. Louis)

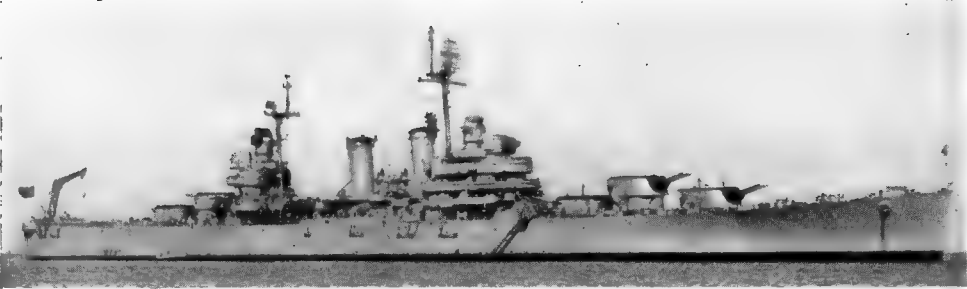
Displacement : Barroso, 9,700 tons standard, 12,500 tons full load. Tamandare, 10,000 tons standard, 12,900 tons full load  
Dimensions : Length : 608½ feet (o.a.). Beam : 69 feet. Draught : 24 (max.) feet  
Guns : 15—6 inch, 47 cal., 8—5 inch, 25 cal., 28—40 mm. AA., 24—20 mm. AA.  
Aircraft : 4 (normal capacity), could accommodate 6.  
Armour : 4”—1½” belt, (5” side in Tamandare), 3” + 2” decks, 5”—3” turrets, 8” C.T.  
Machinery : Westinghouse geared turbines, 4 shafts, S.H.P. : 100,000 = 32.5 kts.  
Boilers : 8 Babcock & Wilcox Express type  
Oil fuel : 2,100 tons  
Radius : 14,500 miles at 15 kts.  
Complement : 888 to 975



Note to Plan.—Represents Tamandaré. Plan of Barroso is similar to that of Capitan Prat in Chilean section

General Notes.—Of same dimensions and generally of similar characteristics, but not sister ships. They were formerly CL 41 and CL 49, respectively, of the U.S. “Brooklyn” and “St. Louis” classes. Purchased from the United States (transferred on 29 Jan. 1951) for a sum representing 10 per cent. of their original cost (\$37,000,000) plus the expense of reconditioning them. Tamandaré differs from Barroso in having her 5-inch guns mounted in pairs behind shields on high bases, a different scheme of boat stowage, a small tripod mast immediately abaft second funnel, and after gunnery control arrangements redistributed.

Hangar Notes.—The hangar in the hull right aft could accommodate 6 aircraft if necessary together with engine spares and duplicate parts, though 4 aircraft has been the normal capacity. The incorporation of this hangar resulted in a very wide and nearly flat counter and high freeboard aft and also gave the after guns higher command. Above the hangar two catapults were mounted as far outboard as possible, and a revolving crane was placed at the stern extremity overhanging the aircraft hatch.



BARROSO

1954, Wright & Logan.



TAMANDARÉ

1953, Brazilian Navy, Official.



BARROSO.

1952, Brazilian Navy, Official.

Name	Builders	Laid down	Launched	Completed
Barroso	Philadelphia Navy Yard	28 May 1935	17 Nov., 1936	28 Jul., 1938
Tamandaré	Newport News S.B. Co.	10 Dec., 1936	15 Apr., 1938	Dec., 1939

## Destroyers (Contratorpedeiros).

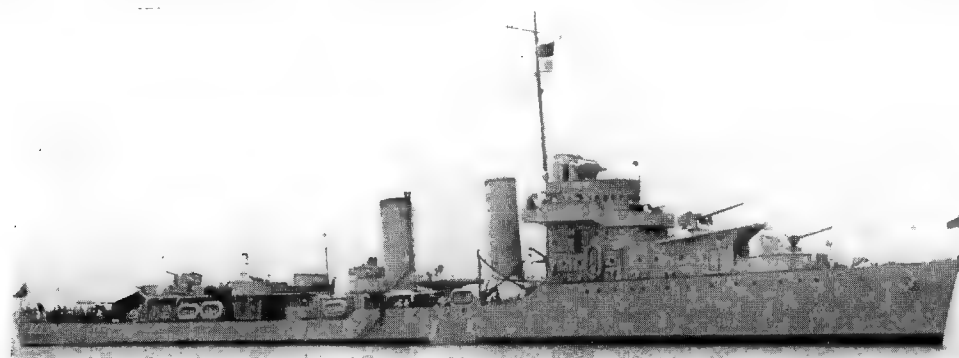


ARAGUAYA 1952, Brazilian Navy, Official.

ACRE	AJURICABA	AMAZONAS	APA	ARAGUARI	ARAGUAYA
		Displacement : 1,450 tons (1,800 tons full load)			
		Dimensions : 323 (o.a.) × 35 × 8½ (mean) 9 (max.) feet			
		Guns : 4—5 inch, 2—40 mm. AA., 4—20 mm. AA., 4 D.C.T.			
		Tubes : 8—21 inch (quadrupled)			
		Machinery : Parsons geared turbines. S.H.P. : 34,000 = 34 kts.			
		Boilers : 3 of 3-drum type			
		Oil fuel : 150 tons			
		Complement : 150			

Notes.—All built by Ilha das Cobras, Rio de Janeiro. Named after rivers. Designated CT. Pendant Nos. A4, A3, A1, A6, A2, A5.

Name	Laid down	Launched	Completed	Name	Laid down	Launched	Completed
Acre	28 Dec., 1940	30 May, 1945	Dec., 1951	Apa	28 Dec., 1940	30 May, 1945	Dec., 1951
Ajuricaba	28 Dec., 1940		Dec., 1951	Araguaya	20 Jul., 1940	24 Nov., 1943	3 Sep., 1949
Amazonas	20 Jul., 1940	29 Nov., 1943	10 Nov., 1949	Araguari	28 Dec., 1940		Dec., 1951

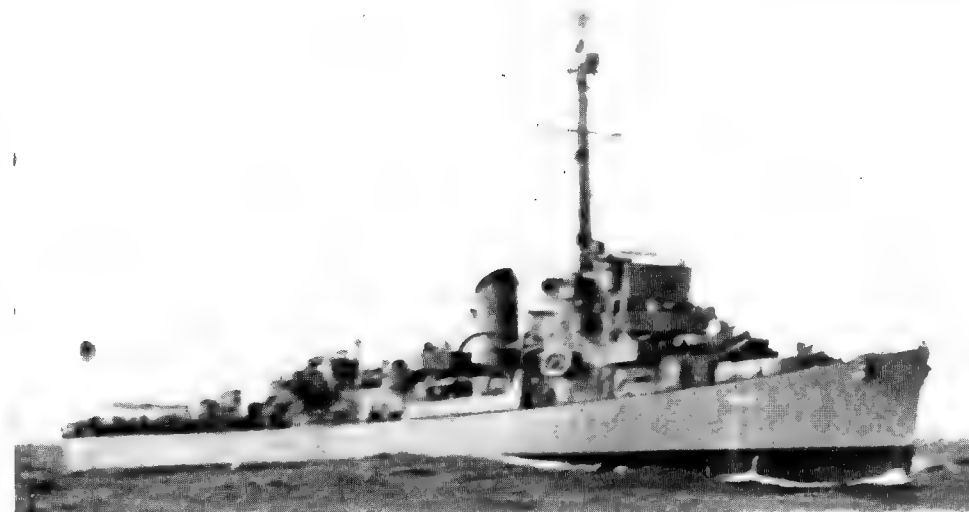


GREENHALGH. 1952, Brazilian Navy, Official.

GREENHALGH	MARCÍLIO DIAS	MARIZ E BARROS
Displacement : 1,500 tons (2,200 tons full load)		
Dimensions : 341 (pp.), 360 (o.a.) × 35 × 10 (mean) 12 (max.) feet		
Guns : 4—5 inch, 38 cal. (d.p.), 4—40 mm. AA., 4—20 mm. AA.		
Tubes : 4—21 inch (quadrupled)		
Machinery : Geared turbines by General Electric Co. S.H.P. : 42,800 = 36.5 kts.		
Boilers : 4 high-pressure watertube of Express type by Babcock & Wilcox		
Oil fuel : 550 tons		
Radius : 6,000 miles		
Complement : 190		

Notes.—All of U.S.A. design and built at Ilha das Cobras Rio de Janeiro with material from U.S.A. These ships are generally similar to destroyers of U.S. Navy, and are armed with guns of American manufacture. Launched 8 July 1941, 20 July 1940, and 28 Dec. 1940, respectively. All three commissioned Nov., 29, 1943. Designated CT. Pendant Nos. M 3, M 1, and M 2, respectively.

## Frigates (Escort Destroyers).



BAURÚ 1952, Brazilian Navy, Official.

BABITONGA (ex-Alger)	BAURÚ (ex-McAnn)	BENÁVENTE (ex-Christopher)	BOCAINA (ex-Marts)
BAEPENDI (ex-Cannon)	BEBERIBE (ex-Herzog)	BERTIOGA (ex-Pennewill)	BRACUI (ex-Reybold)
	Displacement : 1,240 tons (1,900 tons full load)		
	Dimensions : 306 (o.a.) × 37 × 10½ (mean) 12 (max) feet		
	Guns : 3—3 inch (dual purpose), 4—40 mm., 8—20 mm.		
	Tubes : 3—21 inch also D.C.T.		
	Machinery : Geared turbines. 2 shafts. S.H.P. : 16,000 = 21 kts. (19 kts. in service)		
	Oil fuel : 300 tons		
	Complement : 218		

Note.—Ex-American Destroyer Escort type. Launched 1943 (Baependi, 25 May, Benávente June, Bertioiga and Bocaina 8 Aug., Baurú 22 Aug., Beberibe and Bracui 5 Sept.). Transferred from U.S. Navy 1944. Designated CTe. Pendant Nos. BE 7, 5, 4, 2, 6, 1, 8, 3.

## Submarines (Submarinos).



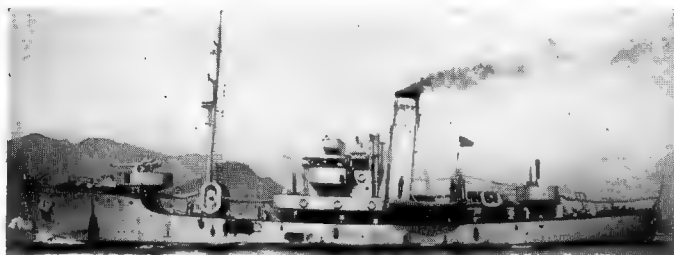
TIMBIRA. 1952, Brazilian Navy, Official.

TAMOI (ex-Ascianghi)	TIMBIRA (ex-Gondar)	TUPI (ex-Neghelli)
Displacement : 615 tons surface, 853 tons submerged		
Dimensions : 195½ × 21 × 13 feet		
Guns : 1—3.9 inch, 47 cal., 4—13 mm. M.G.		
Tubes : 6—21 inch (4 bow 2 stern)		
Machinery : Fiat Diesels and electric motors. H.P. : 1,350-800 = 14.7.5 kts.		
Complement : 37		

Notes.—Built at Spezia by Odero-Terni-Orlando. Launched, 14 Feb., 1937, 30 Dec. 1936, 28 Nov. 1936, respectively. All three delivered in September, 1937. Named after native tribes. Tupi fitted for supersonic signalling. Pendant Nos., T3, T2, T1.

## BRAZIL—Corvettes, Patrol Vessels, River Monitors

### Trawlers (Rated as *Corvetas* and *Naviose-Faroleiros*).



BARRETO MENEZES.

1952, M. J. Meister

**BARRETO MENEZES** (ex-Paru)  
**FELIPE CAMARÃO** (ex-Papaterra)

**HENRIQUE DIAS** (ex-Pargo)

Displacement : 680 tons (full load)  
Dimensions : 160 (pp.), 176½ (o.a.) × 28 × 16 feet (max.)  
Guns : 1—3 inch, 4—20 mm., 4 D.C.T.  
Machinery : Triple expansion. I.H.P. : 1,000 = 12 kts.  
Boilers : Coal fired

**General Notes.**—All laid down as trawler type patrol vessels for the British Navy, but transferred to the Brazilian flag in 1942. *Barreto Menezes* and *Henrique Dias* are fitted as Surveying Vessels. *Matias de Albuquerque* (F1) transferred from Navy to the Fisherman's Confederation in 1952. *Fernandes Vieira* (F4) was scrapped in 1953.

**Historical Notes.**—Named after heroes during War of Independence of Northern Brazil from Dutch domination in 17th century.

No.	Name	Rating	Builders	Laid down	Launched
F6	Barreto Menezes	NF	Ilha Vianna,	1941	Feb., 1945
F2	Felipe Camarao	NF		1941	Jul., 1942
F3	Henrique Dias	CV		1941	26 Aug., 1942
			Rio de Janeiro		

### Minelayers (Rated as *Corvetas* and *Mineiros*).



CANANEA.

1952, Brazilian Navy, Official.

**CABEDEL**  
**CAMOCIM**

**CANANEA**

**CARAVELAS**  
**CARIOCA**

Displacement : 552 tons (780 tons full load)  
Dimensions : 188½ × 25½ × 8 (mean) feet  
Guns : 1—4 inch (Cabelo, 2—3 inch), 4—20 mm. AA.  
Mines : 50  
Machinery : 2 sets vertical triple expansion by Thornycroft.  
I.H.P. : 2,200 = 15 kts.  
Oil fuel : 86 tons  
Complement : 67

**Notes.**—Built at Rio as minelayers and minesweepers but subsequently rated as corvettes. Names are taken from the environs of Rio.

Pendant Nos.	Name	Laid down	Launched
C 4	Cabelo	1938	Oct., 1939
C 3	Camocim	1938	Sep., 1939
C 2	Cananea	6 Nov., 1937	Oct., 1939
C 5	Caravelas	1938	Oct., 1939
C 1	Carioca	6 Nov., 1937	1938

### Patrol Vessels (Rated as *Caça-submarinos*).

#### 5 "G" Class.

**GRAJU** (ex-PC 1236)  
**GRAUNA** (ex-PC 561)

**GUAJARA** (ex-PC 607)  
**GUAPORE** (ex-PC 544)

**GURUPI** (ex-PC 547)

Displacement : 280 tons (450 tons full load)  
Dimensions : 170 (w.l.) 173½ (o.a.) × 23 × 7½ feet  
Guns : 1—3 inch dual purpose (Gurupi and Guaiba 2—3 inch), 1—40 mm. AA., 3—20 mm. AA., 4 D.C.T.  
Machinery : Diesel. 2 shafts. B.H.P. : 3,750 = 22 kts.  
Oil fuel : 60 tons  
Complement : 59

**Notes.**—Built by Defoe Boat & Motor Works (Guajara by Luders Marine Construction Co. Grauna by Leatham Smith S.B. Co.) and acquired from U.S. Navy in 1942-43. *Graju* launched, 24 April, 1943. Steel. Pendant Nos. are G 7, G 8, G 5, G 1 and G 2, respectively. Named after rivers. *Gaiana* (ex-PC 554), *Guaiba* (ex-PC 604) and *Gurupa* (ex-PC 605) scrapped 1952.

### Seaward Defence Boats (Motor Launches).

#### 6 "P" Class (CS).



PIRANHA.

1950, Official.

**PIRAJU** (P1)  
**PIRAMBU** (P2)

**PIRANHA** (P3)  
**PIRAPIA** (P4)

**PIRAQUE** (P5)  
**PIRAUNA** (P6)

Displacement : 130 tons  
Dimensions : 128 × 19½ × 6 feet  
Guns : 1—40 mm., 3—20 mm.  
A/S weapons : 30 D.C.  
Machinery : Diesel. B.H.P. : 890.  
Speed : 20 kts.

**Notes.**—All launched 1947-48. Built at Rio. Wooden construction.

### Corvettes

#### 10 New Construction

**ANGOSTURA**  
**BAHIANA**  
**CABOCLO**

**FORTE DE COIMBRA**  
**IGUATEMY**  
**IMPERIAL MARINHEIRO**

**MEARIM**  
**PURUS**  
**SOLIMÕES**  
**YPIRANGA**

Displacement : 911 tons standard  
Dimensions : 179½ × 30½ × 11½ feet  
Machinery : 2 Diesels Sulzer engines. H.P. : 1,080 each  
Oil fuel : 135 tons

**Note.**—The construction of these coastal patrol vessels has been undertaken on Brazilian account in the Netherlands by Stichting Nederlands Che Scheepsbouw Export Centrale At the Hague Holland.

### River Monitors (Monitores)



1940, Official.

**PARAGUASSU** (ex-Victoria, ex-Espírito Santo)

Builders : Rio  
Launched : 22 Dec., 1938

Displacement : 430 tons  
Dimensions : 146½ × 34½ × 5 feet  
Guns : 1—4.7 inch, 2—3.4 inch howitzers, 2—47 mm., 4 M.G.  
Machinery : 2 sets triple expansion, by J. S. White & Co., Ltd.  
Cowses. I.H.P. : 1,100 = 13 kts.  
Boilers : 2, of 3-drum type  
Oil fuel : 40 tons  
Complement : 71

**Note.**—In Matto Grosso Flotilla. Pendant No. P 3.



Added 1950 courtesy J. Meister.

**PARNAIBA**

Builders : Rio  
Laid down : 11 June, 1936  
Launched : Sep., 1937  
Completed : Nov., 1937

Displacement : 620 tons  
Dimensions : 180½ (o.a.), 178½ (pp.) × 33½ × 5 feet (max. draught)  
Guns : 1—6 inch, 2—3.4 inch howitzers, 2—47 mm., 4 M.G.  
Armour : 3" side and partial deck protection  
Machinery : 2 sets vertical triple expansion by Thornycroft. 2 shafts  
I.H.P. : 1,300 = 12 kts.  
Boilers : 2, of 3-drum type, working pressure 250 lbs.  
Oil fuel : 70 tons  
Complement : 90

**Note.**—In Matto Grosso Flotilla. Pendant No. P 2.

## River Gunboat (*Aviso*).



1953, Brazilian Navy, Official.

**AMAPÁ** (ex-Amapa, ex-Cidade de Belem)

Builders : Thornycroft  
Launched : 1907

Displacement : 195 tons  
Dimensions : 130 (pp.), 137 (o.a.) × 18 × 6 feet  
Guns : 2—3 pdr., 2 M.G.  
Machinery : Triple expansion. 2 shafts. I.H.P. : 450 = 14 kts.  
Boiler : 1 Babcock watertube  
Coal : 51 tons  
Complement : 51

Notes.—In Matto Grosso Flotilla. River gunboat *Amapa* was scrapped in 1952.

## Destroyer Depot and Repair Ship. (*Torpedeiros Depot and Navio Tender*).

**BELMONTE** (ex-Palmara, ex-German *Valisia*)

Builders : Rostock  
Launched : 1912  
Measurement : 5,227 tons gross (6,500 tons deadweight)  
Dimensions : 364½ × 51 × 15 feet  
Guns : 4—4.7 inch, 6—57 mm.  
Machinery : Triple expansion. I.H.P. : 2,700 = 10 kts.  
Complement : 338

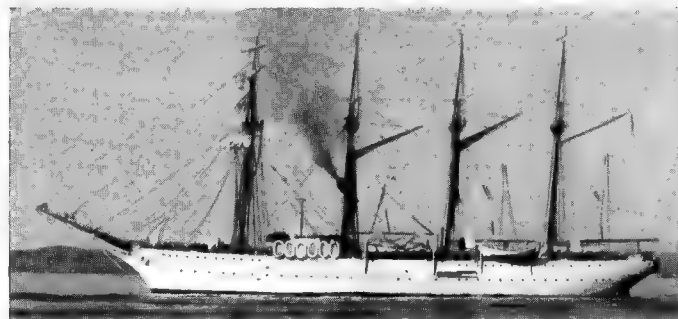
Note.—Pendant No. T I.

## Training Ships (*Navios-Escolas*).

**GUANABARA** (ex-German *Albert Leo Schlageter*)

Builders : Blohm & Voss, Hamburg  
Launched : 31 Oct. 1937  
Displacement : 1,634 tons  
Dimensions : 265½ (pp.), 295½ (o.a.) × 39½ × 15½ (mean), 16½ (max. feet)  
Guns : 2 M.G.  
Sail area : 21,530 sq. ft.  
Machinery : M.A.N. auxiliary Diesels. B.H.P. : 700 = 10 kts.  
Fuel : 48 tons  
Complement : (original) 289, including 200 midshipmen

Notes.—Ex-German sail training ship. Sister of United States Coast Guard training ship *Eagle*. Purchased from U.S.A. Pendant No. NE 2.



1952. R. M. Scott

**ALMIRANTE SALDANHA**

Builders : Vickers Armstrongs, Ltd., Barrow  
Launched : 19 Dec. 1933  
Displacement : 3,325 tons  
Dimensions : 262 (pp.), 307½ (o.a.) × 52 × 18½ feet (mean draught)  
Guns : 4—4 inch, 1—3 inch AA., 4—3 pdr., 1—13 mm. AA., 2 M.G.  
Tubes : 1—21 inch  
Total sail area : 25,990 sq. ft.  
Machinery : Auxiliary Diesel engine. B.H.P. : 1,400 = 11 kts.  
(12 kts. reached on trials)  
Radius of action : 12,000 miles  
Complement : 356 + 100 midshipmen and cadets

Notes.—Cost £314,500. Instructional minelaying gear is included in equipment. Pendant No. NE 1.

**ALBATROS** (ex-Wishbone)

Dimensions : 82½ × 17½ × — feet  
Machinery : Diesel Engine. B.H.P. : 85 for auxiliary propulsion.  
Sail Area : 3,000 square feet.

Note.—British auxiliary schooner yacht sold to the Brazilian Navy as a training ship. Employed as Naval College Training Yacht. Ballast (lead keel) : 28 tons.

## Depot and Training Ships, Transports, etc.—BRAZIL

### Transports (*Navios-Auxiliares*).

**BARROSO PEREIRA**

Displacement : 4,200 tons D.W.  
Dimensions : 384 × 52½ × 20 feet  
Machinery : Geared turbines. H.P. : 4,800. Oil fuel.

Note.—Building in Japan by Ishikawajima Heavy Industries Co., Ltd.



1950, Official

**DUQUE DE CAXIAS** (ex-*Orizaba*)

Launched : 1918  
Displacement : 11,130 tons  
Dimensions : 423 × 60 × 15½ feet  
Guns : 2—4 inch, 12—20 mm.  
Machinery : Geared turbines. S.H.P. : 8,500 = 18 kts.  
Complement : 400

Note.—This vessel was badly damaged by fire on July 31, 1946. Dual purpose armed transport and training ship.



1953, Brazilian Navy, Official.

**ALMIRANTE FRONTIN** (ex-*Itassuce*)

Launched : 1912  
Displacement : 3,600 tons full load  
Dimensions : 288 × 43 × 13½ feet  
Machinery : 2 sets triple expansion. 2 shafts. I.H.P. : 1,800 = 10 kts.  
Boilers : 2  
Coal : 375 tons

Note.—Acquired in 1943 from Brazilian mercantile marine. Pendant No. V 3.

**JOSÉ BONIFÁCIO** (ex-*Itapema*)

Builders : Ailsa S.B. Co., Troon  
Launched : 1909  
Displacement : 1,300 tons  
Dimensions : 270 × 42 × 14 feet  
Guns : 2—4 inch, 2—6 pdr.  
Machinery : Triple expansion. I.H.P. : 540 = 9 kts.  
Complement : 152

Notes.—Employed as surveying ship. Pendant No. V 2.

## Surveying Vessels (*Navios Hidrográficos*).



RIO BRANCO.

1952, Brazilian Navy, Official.

**RIO BRANCO** (ex-Ruth, ex-Margaret)

Builders : Thornycroft  
Launched : 1914

Displacement : 896 tons  
Dimensions : 185 (pp.), 200 (o.a.) × 32 × 10½ feet  
Guns : 2—6 pdr.  
Machinery : Triple expansion. 2 shafts. I.H.P. : 2,000 = 15 kts.  
Coal : 200 tons  
Complement : 91

Note.—The corvette (former minesweeper) *Jaceguai* (ex-H.M.S. *Fairfield*), employed as a surveying vessel, was scrapped in 1952, and the surveying vessel *Aspirante Nascimento* was scrapped in 1953.

## BRAZIL—Oilers, and Tugs

### Oilers (Navios-Tanques)

#### MATARIFE (BO 1)

Notes.—Building (1950). *Matarife* oiler, *Paulo Afonso* water tanker. Near sisters.

#### COMANDANTE GARCIA D'AVILA (ex-YO 71)

Displacement : 1,400 tons  
Dimensions : 176½ × 32 × 15 feet  
Machinery : One Fairbanks Morse Diesel Engine, 5 cylinders, 2 cycle.  
B.H.P. : 500 = 10 kts.

Notes.—Built 1943. Purchased from U.S. Navy in 1947.



1950, Official.

#### ILHA GRANDE (ex-Silver Star Park, ex-Santa Cecilia)

Builders : West Coast Shipbuilders Ltd., Vancouver B.C.  
Launched : 1943  
Displacement : 13,256 tons  
Dimensions : 441½ × 57 × 27½ feet  
Machinery : S.H.P. : 2,500 = 11 kts.  
Boilers : 2 (Combustion Engineering Co. of New York)  
Cargo capacity : 8,935 tons  
Complement : 100

Note.—Ex-U.S.A. AO. Manned by Brazilian Navy—11 officers, 15 petty officers and 74 ratings.



RIJO.

1950, Official.

#### RIJO (ex-Gualula, ex-AOG 28)

#### RAZA (ex-Klaskanine, ex-AOG 63)

Displacement : 2,228 tons  
Dimensions : 217½ × 37 × 7 feet  
Machinery : B.H.P. : 850 = 9 kts.  
Capacity : 1,500 tons  
Complement : 41

Notes.—Both built at East Coast Shipyards, Bayonne, N.J., U.S.A. U.S.M.C. type TI-M-A2. Pendant Nos. R 1 and R 2, respectively.

Name	Laid down	Launched	Completed
Rijo	24 Apr. 1944	3 June 1944	19 Aug. 1944
Raza	21 Dec. 1944	3 Feb. 1945	26 Feb. 1945

### Oilers—continued.

#### POTENGI

Builders : Papendrecht  
Launched : 16 Mar., 1938  
Displacement : 600 tons  
Dimensions : 175½ (pp.) 178½ (o.a.) × 24½ 6 feet.  
Machinery : Diesel engines, 2 shafts, B.H.P. : 550 = 10 kts.  
Oil : 450 tons  
Complement : 19

Note.—Employed in Matto Grosso Flotilla on river service. The oiler *Novais de Abreu* was scrapped in 1953.

### Seagoing Tugs (Rebocadores).



TRIDENTE.

1950, Official.

#### TRIDENTE (ex-ATA 235)

#### TRITÃO (ex-ATA 234)

#### TRIUNFO (ex-ATA 236)

Displacement : 835 tons  
Dimensions : 133½ (w.l.), 143 (o.a.) × 34 × 13 feet  
Machinery : G.M. Diesel-electric. H.P. : 1,500 = 13 kts.

Notes.—All built by Livingston S.B. Co. and launched 1944. Ex-U.S. ATRs. Pendant Nos. *Tridente*, R 2, *Tritão*, R 1, *Triunfo* R 3.

#### ANIBAL MENDONÇA (ex-Times, ex-St. Keyne)

Launched : 1919  
Displacement : 570 tons  
Dimensions : 135 × 30 × 14½ feet  
Guns : 2—3 pdr.  
Machinery : I.H.P. : 1,200 = 12 kts. (present best speed, 10 kts.)  
Coal : 240 tons  
Complement : 45

Note.—*Heitor Peraigão* and *Muniz Freire* were scrapped in 1952.

#### LAURINDO PITTA

#### LOMBA

Displacement : 514 tons  
Dimensions : 130 × 26 × 15 feet  
Machinery : Triple expansion. 2 shafts. I.H.P. : 850 = 11 kts.

Notes.—*Laurindo Pitta* was built by Vickers. Launched 910.

### Tugs.

#### AUDAZ CENTAURO

Measurement : 130 tons gross.  
Dimensions : 82 (pp.), 90½ (o.a.) × 23½ × 7½ (fore), 1½ (aft) feet  
Machinery : Wumag-diesel motor. B.H.P. : 750 = 11 kts.

Notes.—All built at Holland-Nautic Yard, Haarlem, Netherlands in 1953. Small but powerful tugs of a new type for the Brazilian Navy.

#### GUARANI LAMEGO

#### PASSO DA PATRIA VOLUNTARIO

### River Tugs



MARIO ALVES.

1952 Brazilian Navy, Official.

#### MARIO ALVES

Displacement : 280 tons  
Dimensions : 116½ × 22½ × 11 feet  
Guns : 2 M.G.  
Speed : 8 kts.  
Complement : 38

Notes.—In Amazon Flotilla. Launched 1913. Formerly classed as in lighthouse tender (*navios pharoleiros*). Sister ship *Tenente Lahmeyer* was scrapped in 1953.



ANTONIO JOÃO.

1952, Brazilian Navy, Official.

#### ANTONIO JOÃO

Displacement : 80 tons  
Dimensions : 75½ × 17½ × 6½ feet  
Machinery : Fairbanks Morse Diesel Engine, 6 cylinder, 2 cycle.  
B.H.P. : 180.

Notes.—Formerly classed as *aviso*. General utility craft for river service.

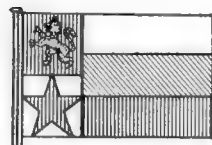


## BULGARIA

## Flags.

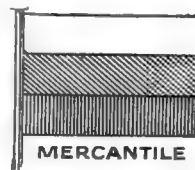
Note that the red of the flag is crimson.

||||| = Red.    — = White.    ▨ = Green.    ···· = Yellow.



ENSIGN

Jack: A white flag with a green saltire and superimposed over all the Cross of St. George.



MERCANTILE

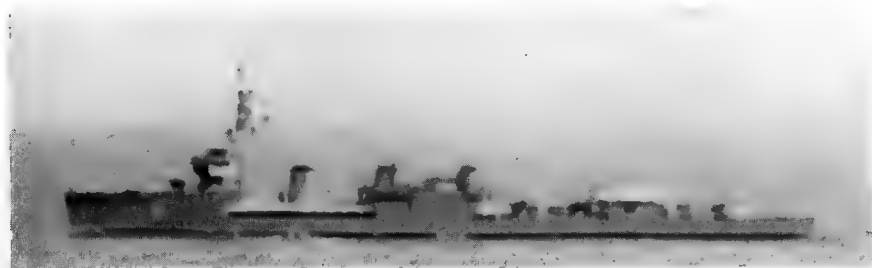
## Treaty Notes.

Strength of fleet is restricted by Peace Treaty to 7,250 tons.

## Personnel

3,500 officers and ratings. (maximum authorized by Treaty)

## Destroyer.



Added, 1951.

**ZHELYEZNYAKOV** (ex-Petrovski, ex-Korfu)

Displacement: 1,350 tons standard (1,600 tons full load)  
Dimensions: 303½ × 29½ × 9 feet  
Guns: 3—3.9 inch, 2—37 mm. AA.  
Machinery: Turbine. S.H.P.: 29,000 = 26 kts.  
Oil fuel: 390 tons

Notes.—Ex-Russian Zhelyeznyakov transferred 1950. Built at Nikolaiev. Launched 1917. Completed 1925.

## Patrol Vessels.

**RILA** and another vessel

Notes.—Both launched 1941

**BELOMORETZ** (ex-French C 27)

Displacement: 77 tons  
Guns: 1—47 mm., 2 M.G.  
Machinery: 3 sets of 220 B.H.P. standard petrol motors, totalling 660 B.H.P. = 17 kts.  
Fuel: 9 tons  
Endurance: 700 miles at 10 kts.  
Complement: 26

**CHERNOMORETZ** (ex-C 80)

Notes.—Former submarine chasers built in the United States in 1917-18. Both purchased from France in 1922

## Motor Torpedo Boats.

**No. 5** (ex-S 163)

**No. 6** (ex-S 164)

**No. 7** (ex-S 165)

**No. 8** (ex-S 166)

Displacement: 57 tons (65 tons full load)  
Guns: 2—20 mm.  
Tubes: 2—21 inch  
Machinery: 3 sets Diesel motors. B.H.P.: 2,850 = 34 kts.  
Complement: 16

Notes.—Former German Schnellboote. Built by Werft Gusto, Holland (1942).



**No. 2**

Displacement: 60 tons  
Dimensions: 92 × 14½ × 5½ feet  
Guns: 1—20 mm. AA.  
Tubes: 2—21 inch  
Machinery: 3 Mercedes-Benz motors. B.H.P.: 3,150 = 34 kts.  
Complement: 18

Notes.—Former German Schnellboote. Built by Lurssen, Vegesack. Launched 1939. No. 1 was lost while in German hands during war.

## Minesweepers.

**DERZKI**

**KHRABRI**

**STROGI**

Displacement: 100 tons  
Dimensions: 126½ × 13½ × 8½ feet  
Guns: 2—47 mm., 1 M.G.  
Machinery: 1 shaft. Designed H.P.: 2,000 = 26 kts. (actual max. 18 kts.)  
Boilers: Du Temple  
Coal: 27 tons  
Complement: 23

Notes.—Creusot boats. Built in sections by Schneider, Châlon-sur-Saône, in France, reassembled at Varna, 1907-08. Originally torpedo boats with 2-18 inch tubes. Reported to be re-fitted for minesweeping. Six motor launches equipped for minesweeping are reported to have been acquired from Soviet Navy. These are believed to be air service tenders abandoned by the Germans in their retreat from the Black Sea. Reported there are some new Bulgarian built minesweepers.

## Auxiliary Sail Training Vessels.

**ASSEN**

Displacement: 240 tons  
Guns: 2—65 mm., 1 M.G.  
Machinery: H.P.: 120 = 7 kts.

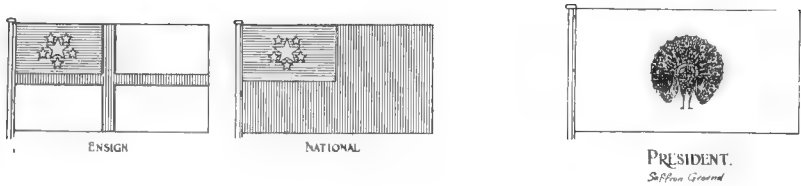
Notes.—Launched 1912. Refitted 1933-34

**KAMCIA**

Speed: 10 kts.

Notes.—Launched 1898. Refitted 1925.

Flags



Administration.

The Burmese Navy was formed on the Declaration of Independence, 4 Jan., 1948.

Chief of Naval Staff : Commander Than Pe.  
Naval, Military and Air Attaché in London : Lieut.-Col. Tin Maung.

Naval Bases.

The main base is U.B.S. " Ratanabon " at Rangoon. There are smaller bases at Akyab and Mergui.

Silhouettes.

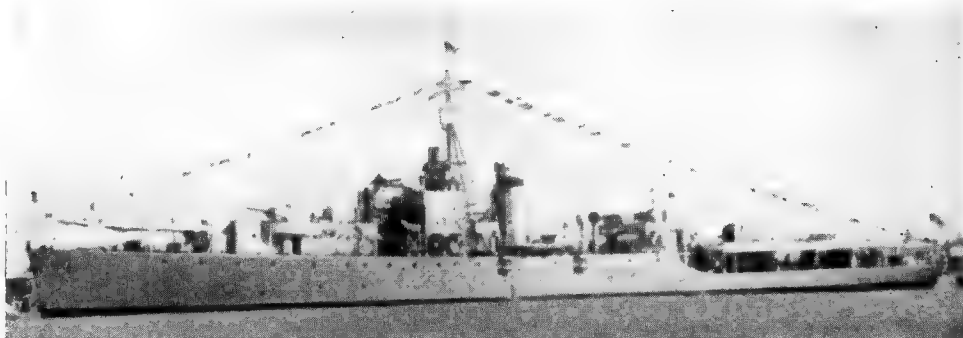


Personnel.

About 2,000 offices and ratings, including reserves.

BURMA

Frigate.

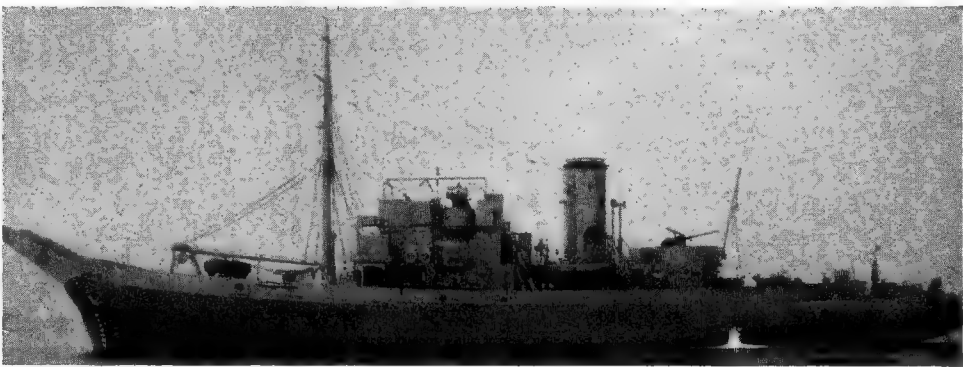


Burmese Navy, Official.

<b>MAYU</b> (ex-H.M.S. <i>Fal</i> )	
Builders :	Smith's Dock Co. Ltd., South Bank-on-Tees
Laid down :	20 May, 1942
Launched :	9 Nov. 1942
Completed :	2 July 1943
Displacement :	1,460 tons standard 2,170 tons full load
Dimensions :	283 (pp.), 301½ (o.a.) × 36½ × 12 feet
Guns :	2—4 inch D.P., 4—40 mm. A.A.
Machinery :	Triple expansion. 2 shafts. I.H.P. : 5,500 = 19 kts.
Boilers :	2, of 3-drum type
Fuel :	440 tons
Complement :	140

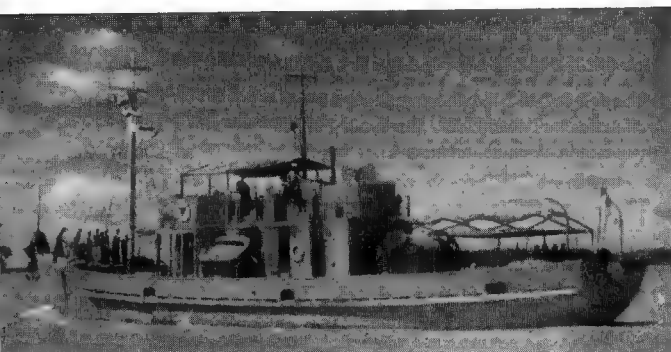
Note.—" River " class frigate acquired from Great Britain in 1947.

Boom Defence Vessel.



<b>BARSTOKE</b>	
Builders :	Wm. Simons & Co., Ltd., Renfrew
Laid down :	28 Oct. 1940
Launched :	9 July 1941
Completed :	28 Aug. 1941
Displacement :	750 tons standard, 960 tons full load
Dimensions :	150 (pp.), 173½ (o.a.) × 32½ × 9½ feet
Guns :	1—3 inch A.A.
Machinery :	Triple expansion. I.H.P. : 850 = 11.75 kts.
Boilers :	2 S.E.
Complement :	112

## Motor Minesweepers.



MMS 201. Added 1950, Burmese Navy, Official.

MMS 197

MMS 201

Displacement : 255 tons  
Dimensions : 105 (pp.), 119 (o.a.)  $\times$  13  $\times$  9½ feet  
Guns : 12—20 mm. AA., 2 M.G.  
Machinery : Diesel. B.H.P. : 500 = 10 kts.  
Complement : 20

Notes.—Wood. Transferred from British Navy at Rangoon in Oct. and Nov. 1946, respectively.

## Gunboats.



INLAY. 1950, Burmese Navy, Official.

INDAW

INLAY

INMA

INYA

Displacement : 381 tons  
Dimensions : 154½ (o.a.)  $\times$  22½  $\times$  7½ feet  
Guns : 2—25 pdr., 2—20 mm. AA.  
Machinery : Paxman Ricardo. 12 T.P.M. Vee-type Diesels. 2 shafts.  
Complement : 39  
B.H.P. : 1,000 = 13 kts.

Notes.—LCG(M) type vessels—landing craft, gun, medium.

## Motor Gunboats.

11 Ex-British H.D.M.L. Type.



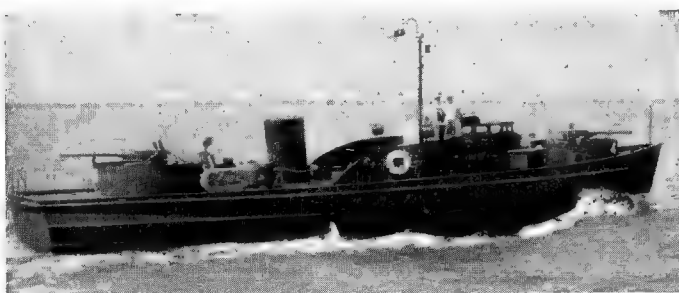
MGB 1467. Added 1950, Burmese Navy, Official.

MGB 1272	MGB 1304	MGB 1369	MGB 1462	MGB 1477
MGB 1299	MGB 1306	MGB 1456	MGB 1467	MGB 1478
				MGB 1486

Displacement : 46 tons (54 tons full load)  
Dimensions : 72 (o.a.)  $\times$  15½  $\times$  5½ feet  
Guns : 2—20 mm. AA. except MGB 1456, 1—2 pdr., 1—20 mm. AA.  
Machinery : Diesel. 2 shafts. B.H.P. : 320 = 12 kts.

Notes.—Ex-British harbour defence motor launches of same numbers.

10 Ex-United States C.G.C. Type.



MGB 104. 1952, Burma Navy, Official.

MGB 101	MGB 103	MGB 105	MGB 107	MGB 109
MGB 102	MGB 104	MGB 106	MGB 108	MGB 110

Displacement : 45 tons (light), 80 tons (full load)  
Dimensions : 83½  $\times$  15½  $\times$  5 feet  
Guns : 2—40 mm. Bofors QF.  
Machinery : General Motors Diesels. 2 shafts. B.H.P. : 1,600 = 11 kts.  
(2 stroke, 6 cylinder. 2 engines on each shaft, tandem geared, 1 L.H. and 1 R.H. drive. 400 H.P. each)  
Complement : 15

Notes.—Launched 1938-42. These ten ex-United States Coast Guard Cutters were transferred to Burma under the Mutual Defense Assistance Program (Officially announced 8 Nov., 1950). These shallow draught patrol craft were converted for use as small gunboats to assist the Burmese Government in patrolling the navigable river systems of Burma. They were brought forward from the Coast Guard Reserve Fleet and rehabilitated at Curtis Bay, Maryland. Refitting included conversion from petrol to diesel machinery and modified armament. Acquired from the United States Navy, 15 Feb. 1951.

## River Gunboats.



SHWEPAZUN. 1952, Burmese Navy, Official.

SABAN

SHWEPAZUN.

Displacement : 98 tons  
Dimensions : 94½  $\times$  22  $\times$  4½ feet  
Guns : 6—20 mm. AA.  
Machinery : Crossley ERL—6 Diesel. B.H.P. : 160 = 12 kts.  
Complement : 32

Note.—Converted inland-water-transport passenger-service craft.

HINTHA

SAGU  
SEINDA

SETKYA  
SETYAHAT

SHWETHIDA  
SINMIN

Guns : 1—20 mm. AA.

## Motor Launches.

ML 1104

Builders

John Thornycroft & Co. Ltd., Southampton.

Dimensions : 76½ (o.a.)  $\times$  13½  $\times$  4½ feet  
Guns : 1—3 pdr., 1—20 mm. AA.  
Machinery : Three RL/6 Thornycroft Diesels. B.H.P. : 650 = 14 kts.

Note.—Fitted for minesweeping.

ML 1102

ML 1103

Dimensions : 76½  $\times$  13½  $\times$  4½ feet  
Machinery : Two RL 6 Thornycroft Diesels and one RY/12 petrol engine. B.H.P. : 780 = 16 kts.

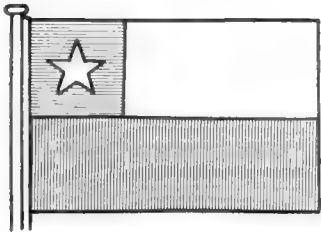
## Patrol Vessels.

No. 1	No. 2	No. 3	No. 4	No. 5	No. 6
Machinery :			Perkins engines. H.P. : 130		

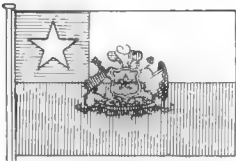
Note.—Six patrol vessels for Burma will be built at the yard of G. de Vries Lentsch at Alphen a.d. Rijn, Netherlands.

CHILE

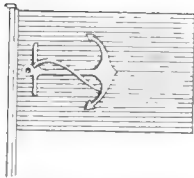
Flags.



ENSIGN and MERCANTILE.



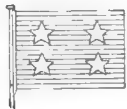
PRESIDENT



MINISTER OF MARINE



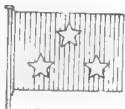
JACK.



COMMANDER-IN-CHIEF  
OF THE FLEET



VICE ADMIRAL  
COMMANDING.



VICE ADMIRAL  
SUBORDINATE



REAR-AD.  
COMMANDING



REAR-AD.  
SUBORDINATE



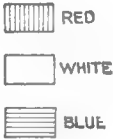
COMMODORE  
COMMANDING



COMMODORE  
SUBORDINATE



SENIOR  
OFFICER



Administration

- Minister of National Defence : Abdon Parra Urzúa.  
Chief of Staff of National Defence : Contra Almirante Leopoldo Fontaine.  
Commander-in-Chief of the Navy : Vice Almirante Francisco O’Ryan  
Chief of the Naval Staff : Contra Almirante Manuel Quintana.  
Chief of the Chilean Naval Mission, Washington : Capitan de Navio Harold Nagel.  
Naval Attaché, London : Capitan de Navio Angel C. Lira.

Uniforms.



Almirante Vice Almirante. Contra- Almirante. Capitan de Navio. Capitan de Fragata. Capitan de Corbeta. Teniente 1º Teniente 2º Sub-teniente. Guardia Marina

Corresponding British or U.S. ranks :—

Admiral Vice- Admiral Rear- Admiral Captain. Commander. Commander Lieutenant (Senior) Lieutenant (Junior). Sub- Lieutenant. Midshipman.

The rank of Almirante is held only by the Commander-in-Chief. Other branches the same with colour as follows :

Supply Officers, white.  
Surgeons, red.  
Chaplains, purple.

Naval Bases

TALCAHUANO. Two dry docks, 614 × 87 × 30½ feet and 800 × 116 × 36 feet respectively.  
One small floating dock, 216 × 42 × 15 feet.  
Torpedo, Submarine, and other Training Establishments here.

VALPARAISO. One small steel floating dock privately owned, 314 × 65 × 21 feet (4,500 tons capacity)  
Staff College and Naval Academy for training of Executive and Engineering branches here, also schools for Communications, Gunnery, Coast Artillery, Navigation, etc.

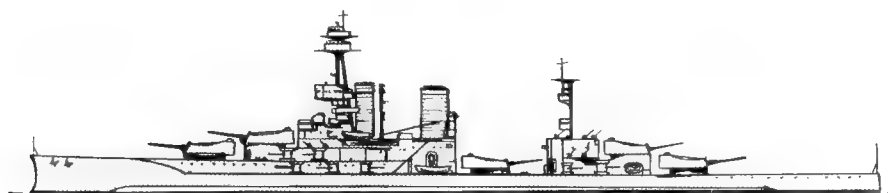
Personnel.

13,000 officers and men.

Mercantile Marine.

Lloyd’s Register, appendix, 1954 : 96 vessels of 200,719 tons gross.

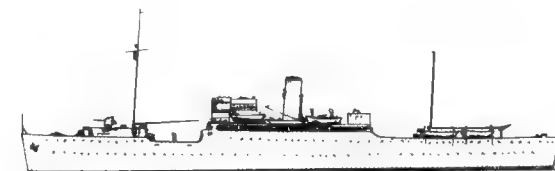
\* Scale: 150 ft. = 1 inch.



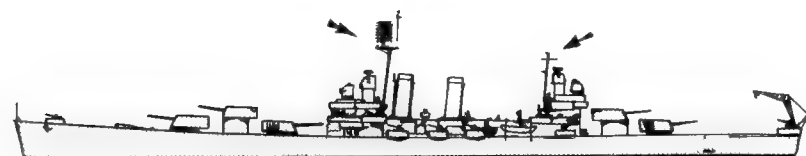
ALMIRANTE LATORRE \*



BAQUEDANO Class. \*



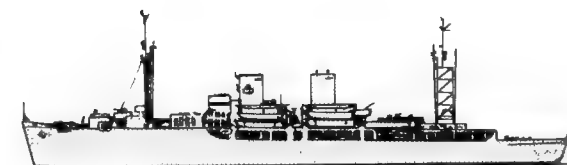
ARAUCANO \*



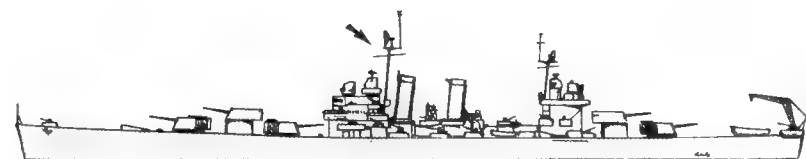
CAPITAN PRAT \*



CASMA Class \*



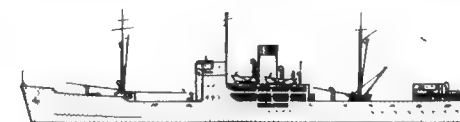
PRESIDENTE ERRAZURIZ, PRESIDENTE PINTO. \*



O'HIGGINS \*



VIDAL GORMAZ.



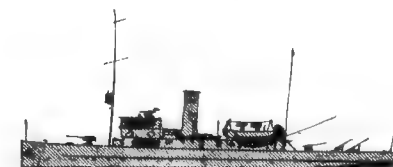
ANGAMOS. \*



SERRANO Class. \*



MICALVI



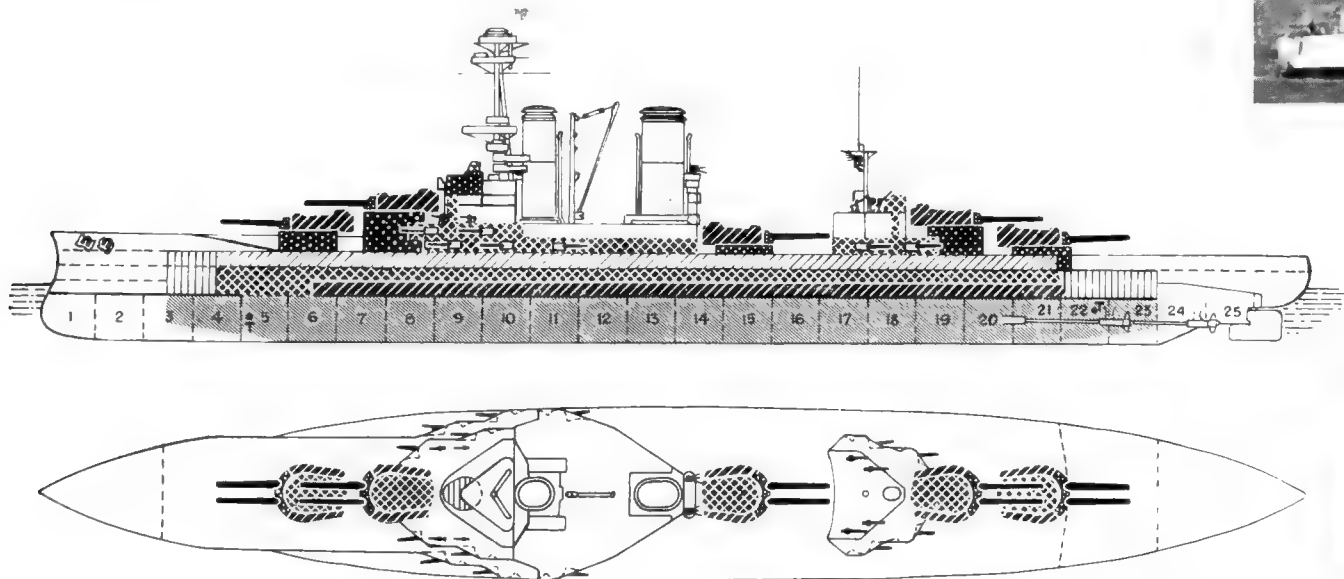
OROMPELLO.



Battleship (Acorazado).

ALMIRANTE LATORRE (ex-British *Canada*, ex-Chilean *Almirante Latorre*, ex-*Valparaíso*).

Builders :	Armstrong
Laid down :	Nov., 1911
Launched :	Nov., 1913.
Completed :	Sept., 1915.
Displacement :	28,950 tons standard (over 32,000 full load).
Dmensions :	Length : 625 (pp), 661 (o.a.) feet. Beam : 92½ feet. Draught : 28½ (mean), 32 (max.) feet
Guns (Armstrong) :	10—14 inch, 45 cal., 14—6 inch, 50 cal., 4—4 inch AA., 4—3 pdr., 18—20 mm. AA., 18 M.G.
Armour (Vertical) :	10" Lower belt, 7" Middle belt, 4½" Upper belt, 6" 4" Belt (ends), 4½", 4" B'lkh'ds (f. & a.) 16" Batteries, 10" Barbettes, 10½" 9" Gunhouses, 3" C.T. base, 11" C.T. (6"-3" hood), 6" Fore com. tube, 6" Torpedo C.T., 6" Aft. com. tube (Bulges)
Armour (Decks) :	1" Shelter (over casemates), 1" Fo'c'sle (over battery), 1½" Upper (outside battery), 1½" Main (aft), 1" Protective : lower 2" (forward) 4" (aft)
Anti-Torpedo Protection :	2"—1½" Bulkheads ; (mags., &c.) Sections, 6-8, 15, 19-21 on plans.
Machinery :	Parsons geared turbines. 4 shafts. Designed S.H.P. : 37,000 — 22.75 kts.
Boilers :	21 Yarrow
Oil fuel :	4,300 tons
Radius :	4,400 miles at 10 kts.
Complement :	1,176



1953, Kenrick Agencies.



1951, Klaus Wernick.

**General Notes.**—Begun for Chile as the *Valparaíso*, her name being altered afterwards to *Almirante Latorre*. Purchased for British Navy on outbreak of War in 1914 and renamed *Canada*. Additional protection, etc., added during War is said to have raised her displacement to over 30,000 tons. Re-acquired by Chile in April, 1920. Arrived at Devonport in summer of 1929 to be refitted in the dockyard under a special contract with new machinery supplied by Vickers-Armstrongs, Ltd. Bulges were fitted, and masts and bridgework underwent slight modifications. The maintopmast was raised to 60 feet, and controls fitted at the ends of the upper bridge ; searchlights removed from bridge ; new turbines and oil fuel only installed. She returned to Chile early in 1931. Extensively refitted 1948-49. Her sister ship, *Almirante Cochrane*, was purchased for British Navy in 1917, renamed *Eagle*, and modified for service as an aircraft carrier, which was lost in 1942.

**Gunnery Notes.**—14-inch have a range limited only by max. visibility. Originally had 16—6 inch, but the 2—6 inch on upper deck, abeam of after funnel, were removed and ports plated over. Reason for removal was because guns were only a few feet from muzzle of "Q" turret 14-inch guns on extreme bearing and were damaged by blast. Anti-aircraft guns are mounted on after superstructure.

**Armour Notes.**—Barbettes 6" and 4" as they descend behind belts.

**Historical Note.**—Latorre, who afterwards rose to flag rank, was Captain of the Chilean ironclad *Cochrane* at the Battle of Angamos, Oct. 8, 1879.



1954, courtesy Dr. Néstor Capetillo P.

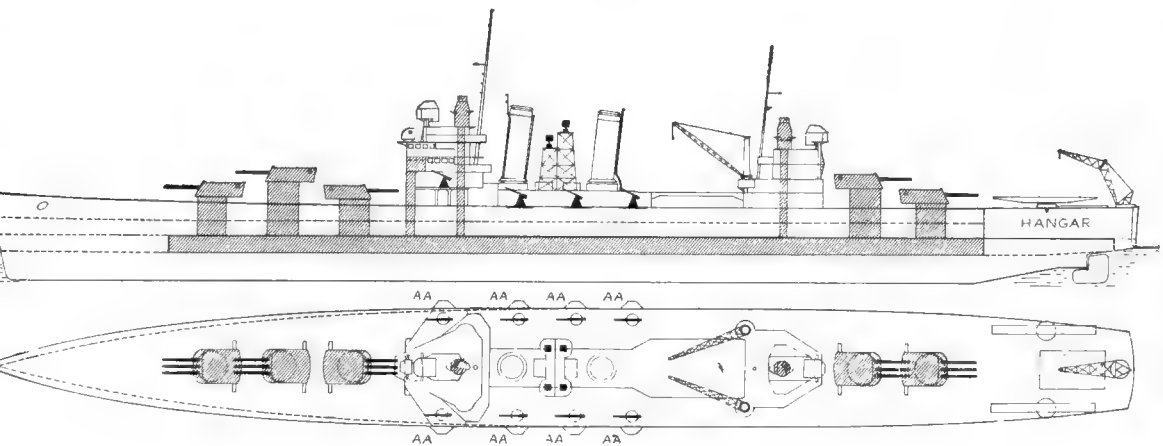
Cruisers (Cruceros)

2 “Capitan Prat” Class.

CAPTAN PRAT (ex-Nashville)

O’HIGGINS (ex-Brooklyn)

Displacement : Capitán Prat : 10,000 tons standard (12,500 tons full load)  
O’Higgins 9,700 tons standard (13,000 tons full load)  
Dimensions : Length : 608½ (o.a.) feet. Beam : 69 feet. Draught : 24 feet (max.)  
Guns : 15—6 inch, 47 cal. ; 8—5 inch, 25 cal. ; 28—40 mm. AA. ; 24—20 mm. AA  
Aircraft : 4 (normal capacity) see notes.  
Armour : 4”-1½” belt, 3”+2” decks, 5”-3” turrets, 8” C.T.  
Machinery : Westinghouse geared turbines. 4 shafts. S.H.P. : 100,000 = 32.5 kts.  
Boilers : 8 Babcock & Wilcox Express type.  
Oil fuel : 2,100 tons.  
Radius : 14,500 miles at 15 kts.  
Complement : 888 to 975 (peace).

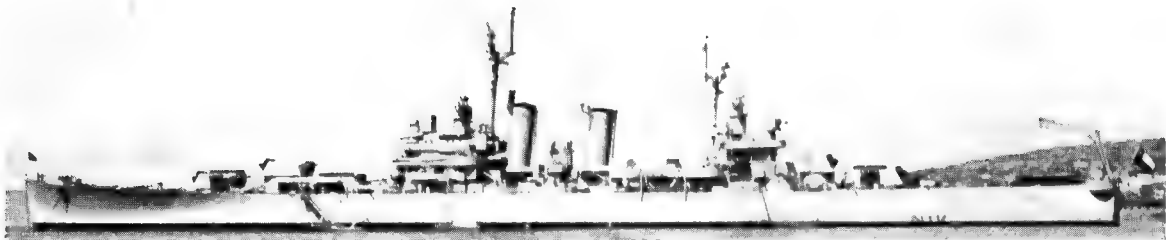


to Plan.—Superstructure of O’Higgins since reduced, bulges added and beam increased.

al Notes.—Formerly CL 43 and CL 40, respectively of the U.S. “Brooklyn” Class. Purchased from the United States in 1951 at a cost representing 10 per cent. of their original cost (\$37,000,000) plus the expense of reconditioning them.

ar Notes.—The hangar in the hull right aft could accommodate 6 aircraft if necessary together with engine spares and duplicate parts, though 4 aircraft is the normal capacity. The existence of this hangar resulted in a very wide and nearly flat counter and high freeboard aft and also gave the after guns higher command. Above the hangar two catapults were mounted as far outboard as possible, and a revolving crane was placed at the stern extremity overhanging the aircraft hatch.

Name	Builders	Laid down	Launched	Completed
Capitan Prat	New York S.B. Co.	24 Jan., 1935	2 Oct., 1937	25 Nov., 1938
O’Higgins	New York Navy Yard	12 Mar., 1935	30 Nov., 1936	18 Jul., 1938



O’HIGGINS.

1954, courtesy Dr. Néstor Capetillo P.



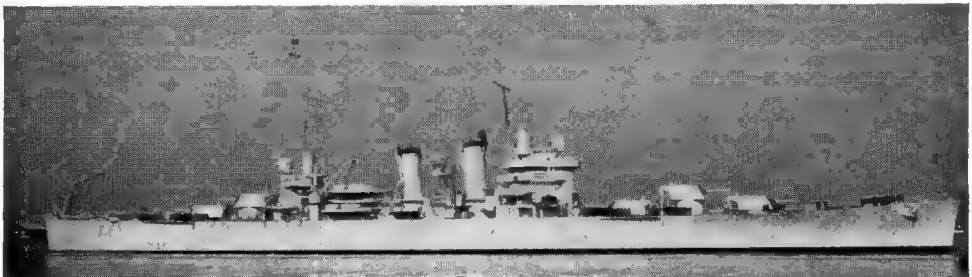
O’HIGGINS

1953 Kenrick Agencies



CAPTAN PRAT

1953, Kenrick Agencies



CAPTAN PRAT

Added 1951, U.S. Navy, Official.

CHILE—Destroyers and Frigates

Destroyers (Destructoros).

Note.—Chilean naval headquarters announced in Santiago January 1954 that two modern destroyers are to be purchased from Great Britain.

6 "Serrano" Class



SERRANO. 1954, courtesy Dr. Néstor Cape tillo P.



HYATT. (Riquelme still retains her mainmast). 1950, Chilean Navy, Official.

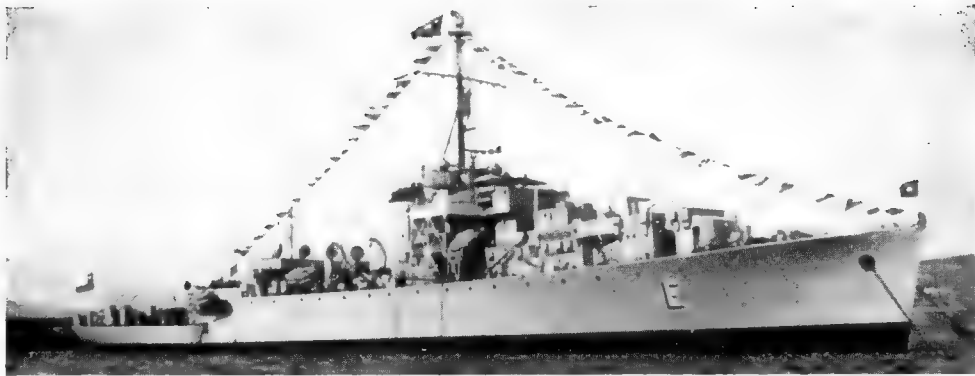
ALDEA	HYATT	ORELLA	RIQUELME	SERRANO	VIDELA
Displacement :	1,090 tons standard (1,430 tons full load)				
Dimensions :	288½ (pp.), 300 (o.a.) × 29 × 12½ feet (max.)				
Guns :	3—4.7 inch, 1—3 inch AA., 3—20 mm. AA., 2 M.G.				
Tubes :	6—21 inch, in triple deck mountings.				
Machinery :	Geared turbines Parsons (l.p.), Brown-Curtis (h.p. and cruising). 2 shafts. S.H.P. : 28,000 = 35 kts.				
Boilers :	3 Thornycroft 3-drum type				
Oil fuel :	320 tons				
Complement :	130				

General Notes.—Fitted for carrying mines. Plating is galvanised throughout, and the heavy hull scantlings reduce the stresses to even less than those allowed by British Admiralty practice. All exceeded their contract speed on trials. They have exceptionally good accommodation for vessels of their size, and are adapted for service in a wide range of climates.

Appearance Notes.—All to be distinguished by initial letter of name painted on bows.

Letter	Name	Builders	Laid down	Launched	Completed
A	Aldea	John I. Thornycroft & Co., Ltd., Southampton	All June—July, 1927	29 Nov. 1928	1929
H	Hyatt			21 July 1928	1929
O	Orella			8 Mar. 1928	1929
R	Riquelme			28 May 1928	1929
S	Serrano			25 Jan. 1928	Sep. 1928
V	Videla			16 Oct. 1928	1929

Frigates (Fragatas)



BAQUEDANO. 1953, Klaus Wernick.

BAQUEDANO (ex-Esmeralda ex-Glace Bay, ex-Lauzon)	COVADONGA (ex-Seacliff, ex-Megantio)	IQUIQUE (ex-Joliette)
Displacement :	1,445 tons (2,125 tons full load)	
Dimensions :	301 × 37 × 13 feet	
Guns :	2—4 inch AA., 10—20 mm. AA.	
Machinery :	2 sets triple expansion. 2 shafts. I.H.P. : 5,500 = 20 kts.	
Boilers :	2, of 3-drum type	
Oil fuel :	646 tons	
Complement :	140	

General Notes.—Launched 26 Apr. 1944, 8 July 1944, and 12 Nov. 1943 ; completed 2 Sep. 1944, 26 Sep. 1944 and 14 June 1944 ; built by Geo. T. Davie Ltd., Lauzon, P.Q. ; Davie Shipbuilding Co., Lauzon, P.Q. and Morton Ltd., Quebec City, P.Q. respectively. Purchased from Royal Canadian Navy, 1946. Esmeralda was renamed Baquedano in 1952.

Appearance Notes.—Distinguished by initial letters of their names : B—Baquedano ; C—Covadonga ; I—Iquique.



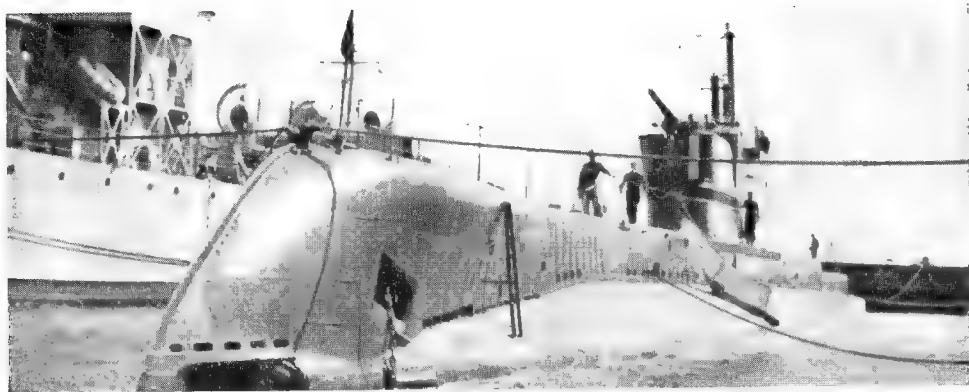
CHIPANA. 1946, Chilean Navy, Official.

CASMA (ex-Stellarton, April 27, 1944)	CHIPANA (ex-Strathroy, June 15, 1944)	PAPUDO (ex-Thorlock, May 15, 1944)
Displacement :	980 to 1,060 tons (1,340 tons full load)	
Dimensions :	193 (pp.), 205 (o.a.) × 33½ × 14½ feet (max.)	
Guns :	1—4 inch, 6—20 mm. AA.	
Machinery :	Triple expansion. I.H.P. : 2,750 = 16.5 kts.	
Boilers :	2, of 3-drum type	
Complement :	66	

General Notes.—Launch dates above. Completed 29 Sep. 1944, 20 Nov. 1944 and 13 Nov. 1944. Built by Morton Ltd., Quebec City, P.Q. (Casma) and Midland Shipyards Ltd., Midland, Ont. (other two). Purchased from Royal Canadian Navy, 1946. Rated as Corbetas Chipana actually serves as a surveying vessel.

Appearance Notes.—Now no C Pendant numbers. Distinguished by initial letters of their names : C—Casma ; CH—Chipana ; P—Papuda

Submarines.



CAPITAN THOMPSON.

1954, Kenrick Agencies.

ALMIRANTE SIMPSON

Displacement :  
Dimensions :  
Guns :  
Tubes :  
Machinery :  
Fuel :  
Complement :

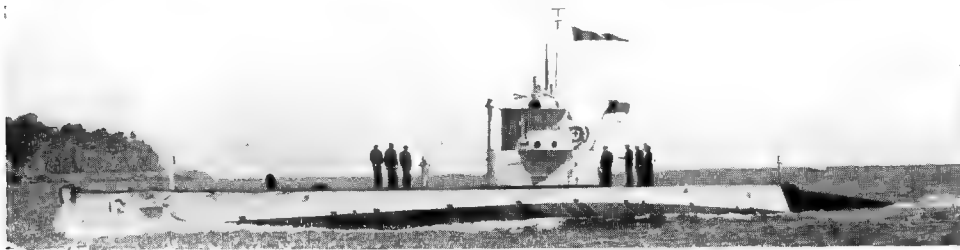
CAPITAN O'BRIEN

1,412 tons surface 2,020 tons submerged  
275 × 28 × 13½ feet  
1—4.7 inch  
8—21 inch (6 bow, 2 stern)  
H.P. 3,000 : = 15 kts. (surface), H.P. : 1,300 — 9 kts. submerged.  
200 tons  
54

CAPITAN THOMPSON

*Historical Notes.*—George O'Brien, one of Chile's earliest naval officers, was killed in action as captain of the frigate *Lautaro*, in the War of Independence. Simpson was one of Lord Cochrane's officers when the latter assumed command of the Chilean Navy in November, 1818; he subsequently commanded the Chilean squadron operating on the coast of Peru in 1838-39, defeating the combined Peruvian and Bolivian squadrons at the Battle of Casma in the latter year. Thompson commanded the *Huascar* in the war against Peru and Bolivia from 1879 to 1882, when he was killed in action.

Name	Builders	Laid down	Launched	Completed
Almirante Simpson	Vickers-Armstrongs, Barrow-in-Furness	15 Nov. 1927	15 Jan. 1929	14 Sep. 1929
Capitan O'Brien		15 Nov. 1927	2 Oct. 1928	19 Jun. 1929
Capitan Thompson		15 Nov. 1927	15 Jan. 1929	24 May 1929



1933, Chilean Navy, Official.

FRESIA (H 6)

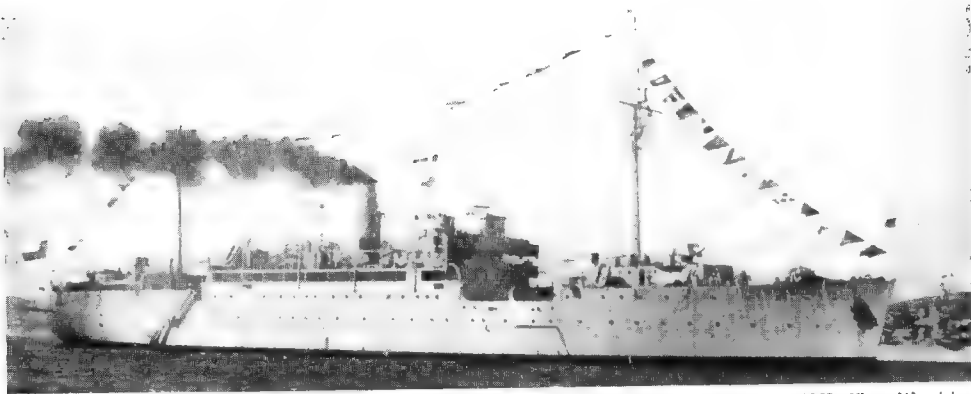
Displacement :  
Dimensions :  
Torpedo tubes  
Machinery :  
Endurance :  
Fuel :  
Complement :

335 tons surface, 467 tons submerged  
150½ × 15½ × 12½ feet  
4—18 inch (bow)  
2 sets 240 H.P. Nelseco Diesels H.P. : 480 = 13 kts. (surface), H.P. : 640 = 11 kts. (submerged)  
2,800 miles at 11 kts. on surface ; 30 miles at 5 kts. submerged  
17½ tons  
22

GAULE (H 4)

*Notes.*—These boats, of Holland type (Electric Boat Co. design), were originally H20 and H18, respectively of the British H11-20 group of submarines, built by the Fore River Co., U.S.A., during 1915-17. Names are those of Araucanian heroines, wives of caciques who fought against the Spanish invaders. No longer in service. Sister ships *Gualcolda* and *Quidora* discarded.

Submarine Depot Ship.



1953, Klaus Wernick.

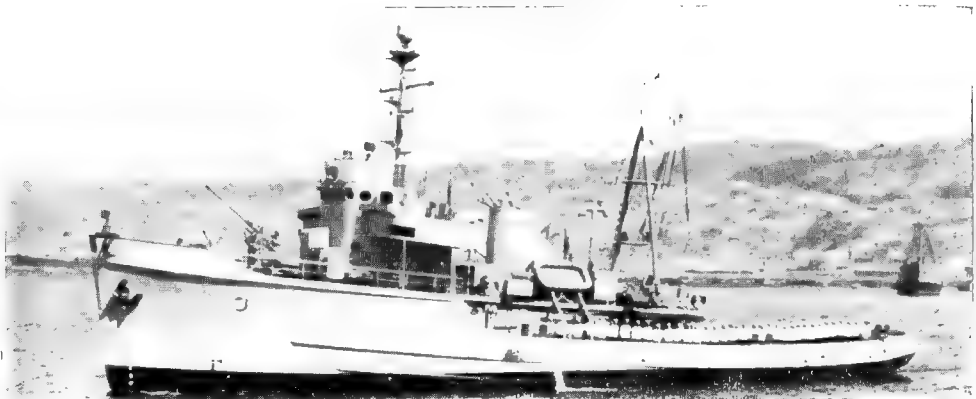
ARAUCANO

Builders : Vickers-Armstrongs, Ltd., Barrow  
Laid down : 1 March, 1929  
Launched : 22 Oct., 1929.  
Completed : March, 1930

Displacement : 6,438 tons (9,000 tons full load)  
Dimensions : 390 (pp.), 412½ (o.a.) × 55½ × 16½ (mean), 17½ (max.) feet  
Guns : 2—4.7 inch, 5—20 mm. AA., 2 M.G.  
Aircraft : 1 seaplane  
Machinery : Parsons geared turbines. S.H.P. : 2,400 = 13 kts.  
Coal : 670 tons

*Notes.*—Has accommodation for 585 personnel, including crews of attached submarines. Has had a seaplane added to her equipment.

Patrol Vessels.



Added 1949.

LEUCOTON.

AUTARO (ex-U.S.S. ATA 122)

LIENTUR (ex-U.S.S. ATA 177)

LEUCOTON (ex-U.S.S. ATA 200)

Displacement : 800 tons  
Dimensions : 143 × 33 × 12 feet  
Guns : 1—3inch A.A., 2—20 mm. A.A.  
Machinery : Diesel. 2 screws. B.H.P. : 1,500 = 12.5 kts  
Oil fuel : 187 tons  
Complement : 33

*Notes.*—Patrol Vessels of the armed tug type. Launched 1944. Built by Livingston Shipbuilding Co. Orange, Texas, U.S.A.

**CHILE—Minelayer, Coastguard Vessels, Landing Craft, Training Ships.**

**Minelayer.**

**OROMPELLO** (ex-Bekas)

Builders : Maskin och Brobyggnads Co., Helsinki  
Completed : 1919

Displacement : 530 tons  
Dimensions :  $172\frac{1}{2}$  (o.a.)  $\times$   $24\frac{1}{2}$   $\times$  11 (max.) feet  
Guns : 2—3 inch  
Machinery : 2 sets triple expansion, 2 shafts. I.H.P. : 1,400 = 14.5 kts.  
Boilers : 3 cylindrical  
Coal : 65 tons  
Complement : 42

Notes.—Refitted by Messrs. J. Samuel White & Co., Cowes, 1920. Former minelayer. No longer in active service. Training vessel for minelaying instruction at the Naval School at Talcahuana.

**Coastguard Vessels (Escampavias).**

Note.—Coastguard vessels are employed on Surveying Service.

**MICALVI** (ex-Boston Lines, ex-Bragi).

Builders : Ostsee Werft, Stettin  
Launched : 1925

Displacement : 850 tons (612 tons gross)  
Dimensions :  $181\frac{1}{2}$   $\times$   $28\frac{1}{2}$   $\times$  11 feet  
Machinery : triple expansion. I.H.P. : 380 = 9.5 kts.

Note.—Small transport and cargo ship.



YELCHO. 1938, Chilean Navy, Official.

**YELCHO**

Launched : 1906

Displacement : 280 tons (467 tons full load)  
Dimensions :  $128 \times 23 \times 9\frac{1}{2}$  feet  
Speed : 12 kts.

Note.—Employed on Surveying Service.

**Landing Craft (Barcazas).**



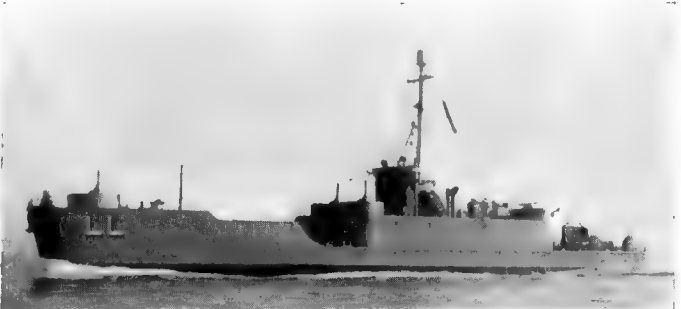
ASPIRANTE GOICOLEA Added 1949, Official.

**ASPIRANTE GOICOLEA  
ASPIRANTE HOREL**

Displacement : 743 tons (1,095 tons full load)  
Dimensions :  $196\frac{1}{2}$  (w.l.),  $203\frac{1}{2}$  (o.a.)  $\times$   $34\frac{1}{2}$   $\times$   $7\frac{1}{2}$  feet  
Machinery : Diesel. 2 shafts. B.H.P. : 2,800 = 12 kts.

Notes.—Ex-LSM 400, 295, 417, 113, respectively. All launched 1944.

**ASPIRANTE IZAZA  
GUARDIAMARINA CONTRERAS**



EDUARDO LLANOS. Added 1949, Official.

**CABO BUSTOS  
EDUARDO LLANOS  
GRUMETE BOLADOS**

Displacement : 367 tons full load  
Dimensions :  $159 \times 23\frac{3}{8} \times 5\frac{3}{8}$  feet  
Machinery : Diesel. 2 shafts. B.H.P. : 1,320 = 14 kts.

Notes.—Ex-LCIL 878, 1025, 1073, 877, 1072, 1, 27, respectively. All launched 1943. Above 10 units are named after personnel killed in action during the war with Peru and Bolivia, 1879-80.

8 of LCP type  
22 of LCVP type  
2 of LCPL type

Note.—All above 32 vessels of LCP, PLCV and LCPL type purchased from U.S. Navy in 1947.

**GRUMETE DIAZ  
GRUMETE TELLEZ  
SOLDADO CANAVES**

**Training Ship (Buque Escuela).**



ESMERALDA. 1954, Chilean Navy Official

**ESMERALDA** (ex-Don Juan de Austria)

Builders : Echevarrieta Yard, Cadiz

Displacement : 3,040 tons standard (3,673 tons full load)  
Dimensions :  $308\frac{1}{2} \times 43 \times 23$  (max.) feet  
Machinery : Auxiliary Diesel. B.H.P. : 1,400 = 12 kts.  
Complement : 271 plus 80 cadets

Notes.—Four-masted schooner, completed 1952. Built in Spain and originally intended for Spanish Navy. Transferred to Chile 12 May, 1953. Similar to Brazilian training ship Almirante Saldanha.

**Tender (Buque-tender de la Esquela Naval).**



**VIDAL GORMAZ** (ex-Cynara, ex-Jason)

Builders : Day, Summers & Co., Southampton  
Launched : 1913

Displacement : 702 tons standard  
Dimensions :  $178$  (w.l.),  $190$  (o.a.)  $\times$   $28\frac{1}{2}$   $\times$  14 feet  
Machinery : Quadruple expansion. I.H.P. : 1,200 = 13 kts.  
Boilers : 2 cylindrical  
Coal : 165 tons

Notes.—Yacht purchased 1940 and adapted for surveying duties by John I. Thornycroft & Co. Ltd., Southampton. Named after the celebrated Chilean hydrographer. In 1953 became tender to ordinary seaman school at Talcahuano, and classed as patrullero.



Attack Transports (*Transportes de Ataque*).


PRESIDENTE ERRAZURIZ

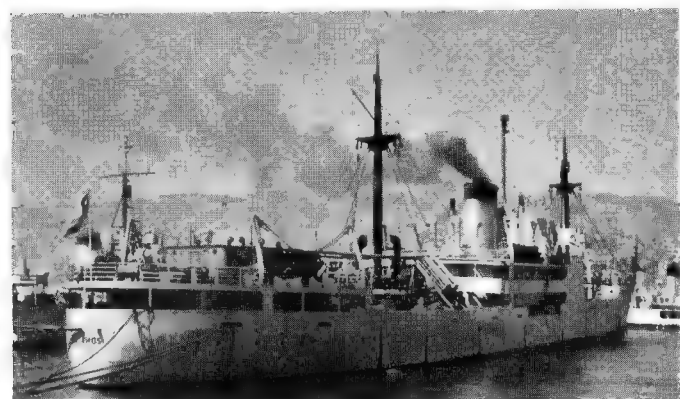
1948, Official.

**PRESIDENTE ERRAZURIZ** (*ex-Xenia*, AKA 51, 27 June, 1943)

**PRESIDENTE PINTO** (*ex-Zenobia*, AKA 52, 6 July, 1945)

Displacement : 6,744 tons  
 Dimensions : 426 (o.a.)  $\times$  58  $\times$  16 (max.) feet  
 Guns : 1—4.7 inch, 2—3 inch, 8—40 mm.  
 Machinery : Turbo-electric. 2 shafts. S.H.P. : 6,000 — 17 kts.  
 Boilers : 2 Wickes  
 Complement : 225 (*Presidente Pinto*)

Notes.—Both built by Walsh-Kaiser. Purchased from U.S. Navy, Nov., 1946. Distinguished by E and P painted on hulls. *Presidente Errazuriz* served as fleet flagship for a time. Launch dates above. *Presidente Pinto* actually serves as a training ship for midshipmen



ANGAMOS.

1954, Kenrick Agencies.

**ANGAMOS**

Built : Aalborg  
 Laid down : 5 April, 1940  
 Launched : 1941  
 Delivered : Feb., 1946

Displacement : 3,800 tons  
 Dimensions : 315 (pp.), 340 (o.a.)  $\times$  46  $\times$  19½ feet  
 Machinery : Triple expansion. I.H.P. : 2,200 = 12 kts.  
 Coal : 575 tons  
 Complement : 72 + 74 passengers or troops

Historical Note.—Named after the naval victory which, on 8 October, 1879, virtually decided the issue of the war against Peru and Bolivia.

## Transports—continued.

**PILCOMAYO** (*ex-Draga*)

Launched : 1931  
 Measurement : 2,364 tons gross, 1,241 tons net.

Note.—*Ex-Draga Fiscal Pilcomayo*. Used as a collier.

The transport *Abtao* (*ex-Sosua*) has been discarded.

The transport *Magallanes* (*ex-Yugoslavian steamer Gundulic*, which was salvaged by the Chilean Navy in 1945 after being grounded and abandoned in 1944) has been sold for breaking up.

## Oilers.

**ALMIRANTE JORGE MONTT**

Displacement : 16,500 tons

Note.—Naval tanker under construction in France. Also reported as 17,750 tons.



MAIPO.

1948 Lunn Easton, Esq.,

**MAIPO**
**RANCAGUA**

Displacement : 7,715 tons (3,800 tons gross)  
 Dimensions : 365  $\times$  49½  $\times$  22½ feet  
 Guns : 2—4.7 inch, 2 M.G. AA.  
 Machinery : Triple expansion. 2 shafts. I.H.P. : 4,800 = 15 kts.  
 Boilers : 4 S.E.  
 Oil fuel : 725 tons  
 Complement : 54

Notes.—Distinguished by initials of names painted on bows. Names are those of actions during the War of Independence—Maipo on 15 April, 1818 ; Rancagua on 1 Oct., 1814.

Name	Builders	Laid down	Launched	Completed
Maipo	Vickers-Armstrongs, Ltd., Tyne	Mar., 1929	Jan., 1930	Mar., 1930
Rancagua		Mar., 1929	Nov., 1929	Mar., 1930

 Seagoing Tugs (*Remolcadores de Alta Mar*).

## I "Huemul" Class.

**HUEMUL** (*ex-Vilumilla*)

Displacement : 320 tons  
 Dimensions : 100 (w.l.)  $\times$  22  $\times$  13 feet  
 Machinery : Triple expansion. I.H.P. : 650 = 12 kts.  
 Boiler : 1  
 Coal capacity : 35 tons

Notes.—Built at Valdivia and launched 1937. Another of the same type, *Contramaestre Brito* (*ex-Pelantaro*) was lost.

## 5 "Cabrales" Class



GALVARINO

1953 Kenrick Agencies

**CABRALES** (24 Oct., 1929)  
**COLOCOLO**
**GALVARINO**  
**JANEQUEO** (1930)  
**SOBENES** (23 Oct., 1929)

Displacement : 790 tons  
 Dimensions : 126½  $\times$  27  $\times$  12 (mean) feet  
 Machinery : Triple expansion. I.H.P. : 1,050 = 11 kts.  
 Coal capacity : 130 tons

Notes.—All built by Bow, McLachlan & Co., Paisley. Launch dates above. These ships are classed as coastguard vessels.

**PILOTO SIBBALD**

Builders : Bow, McLachlan & Co., Paisley  
 Launched : 1916

Displacement : 1,100 tons  
 Dimensions : 141½  $\times$  28½  $\times$  11 feet  
 Machinery : Triple expansion. 2 screws. I.H.P. : 1,200 = 11.5 kts  
 Boilers : 2 cylindrical  
 Coal capacity : 145 tons  
 Complement : 18

Notes.—Possesses fire-fighting and salvage equipment. During 1916-19 this vessel was taken over by the Royal Navy, in which she served as the *Stoic*. Re-acquired by Chile in 1920. Classed as coastguard vessel.

CHINA (COMMUNIST)  
(Personnel : Naval, 25,000; Marine, 28,000)

Light Cruiser.

**VICTORY** (ex-Chungking, ex-H.M.S. Aurora)

Notes.—Defected to Communists in early 1949 and in March 1949 was bombed and sunk in Taku Harbour by Chinese Nationalists to whom she had been given by Great Britain in late 1951. Renamed *Victory* (operational).

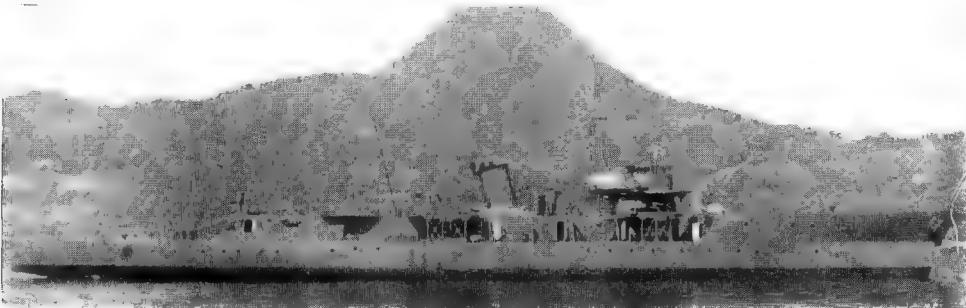
Frigates.

2 Ex-Japanese Escort Destroyer Types.

**HUI AN** (ex-Shisaka)

Launched : 1943  
Completed : 1945  
Displacement : 1,020 tons (940 tons standard)  
Dimensions : 258½ (o.a.) × 30 × 10 feet  
Guns : 2—4.7 inch, 6 M.G.  
Machinery : 2 Diesels. B.H.P. : 4,200 = 19.5 kts.  
Radius : 5,000 miles at 16 kts.  
Complement : 150

Notes.—Ex-Japanese. Reported to have been repaired after 1950 bombing. Sister ship of *Cheng An* which is Nationalist.



Added 1953, Hajime Fukaya.

**CHANG PEI** (ex-Japanese Oki, ex-Chinese Ku An)

Builders : Uraga Dock Company, Limited  
Laid down : 27 Feb. 1942  
Launched : 20 Oct. 1942  
Completed : 31 Mar. 1943  
Displacement : 1,020 tons (870 tons standard)  
Dimensions : 237½ (p.p.), 250 (w.l.), 255 (o.a.) × 30 × 10 feet  
Guns : 3—4.7 inch, 1—3.1 inch, 15—25 mm. AA.  
A.S. Weapons : 60 D.C.  
Machinery : 2 Diesels. 2 shafts. B.H.P. : 4,200 = 19.7 kts.

Notes.—Ex-Japanese Type A or "Etorofu" class. Above is original armament. Sister ship of *Lin An* held by Nationalists.

1 Ex-Japanese Sloop (Gunboat) Type.

**NAN CHANG** (ex-Chinese Chang Chi, ex-Japanese Uji)

Builders : Sakurajima Works, Osaka  
Launched : 26 Sep. 1940  
Completed : 1941  
Displacement : 1,206 tons  
Dimensions : 249½ (p.p.), 257½ (w.l.), 264 (o.a.) × 31½ × 8½ feet  
Guns : 3—4.7 inch, 9—25 mm. AA., 3 M.G.  
Machinery : 2 turbines. S.H.P. : 4,600 = 20.15 kts.  
Boilers : 2  
Radius : 3,460 miles at 14 kts.  
Complement : 170

Frigates—continued.  
6 Ex-Japanese Corvette Types.



**CHI AN.**  
**CHI AN** (ex-No. 85)

Displacement : 810 tons  
Dimensions : 206½ (p.p.), 216½ (w.l.), 221½ (o.a.) × 27½ × 9½ feet  
Guns (original) : 2—4.7 inch, 1—3.1 inch, 12—25 mm.  
A.S. Weapons : 120 D.C.  
Machinery : 2 Diesels. B.H.P. : 1,900 = 16.5 kts.

Notes.—Ex-Japanese C or No. 1 Type. *Chi An* built by Tsurumi, begun 20 Nov. 1944, launched 27 Jan. 1945, completed 31 May 1945

Added 1953, Hajime Fukaya.  
**SHEN YANG** (ex-Yuang An, ex-Mukden, ex-No. 81)



**SI AN.**  
**CHANG SHA** (ex-Chinese Chieh 12, ex-Japanese No. 118)  
**CHI NAN** (ex-Wei Hai, ex-No. 194)

Added 1953, Hajime Fukaya.  
**SI AN** (ex-Chinese Chieh 14, ex-Japanese No. 198)  
**WU CHANG** (ex-Chinese Chieh 5, ex-Japanese No. 14)

Displacement : 900 tons  
Dimensions : 213½ (p.p.), 223 (w.l.), 228 (o.a.) × 28½ × 10 feet  
Guns (original) : 2—4.7 inch, 1—3.1 inch, 12—25 mm.  
A.S. Weapons : 120 D.C.  
Machinery : 1 turbine. S.H.P. : 2,500 = 17.5 kts.

Notes.—Ex-Japanese Type D or No. 2 Type.

Name	Builders	Laid down	Launched	Completed
<i>Chang Sha</i>	Kawasaki, Sensha Works	8 June 1944	18 Oct. 1944	27 Dec. 1944
<i>Si An</i>	Mitsubishi, Nagasaki	17 Jan. 1945	26 Feb. 1945	31 Mar. 1945

1 Ex-Canadian Corvette Type.

**KUANG CHOU** (ex-Chinese Yuan Pei, ex-H.M.C.S. Bowmanville, ex-Nunney Castle)

Builders : Wm. Pickersgill & Sons, Ltd., Sunderland  
Laid down : 12 Aug. 1943  
Launched : 26 Jan. 1944  
Completed : 8 Oct. 1944  
Displacement : 1,100 tons (1,580 tons full load)  
Dimensions : 252 (o.a.) × 36½ × 15½ (max.) feet  
Guns : 2—5.1 inch, 3—37 mm. AA.  
Machinery : Triple expansion. I.H.P. : 2,800 = 16.5 kts.  
Boilers : 2 three-drum type  
Oil fuel : 480 tons

Notes.—Converted from merchant vessel by Chinese Communists and rearmed.

## Gunboats.

## YUNG SUI

Builders : Kiangnan Dock Co., Shanghai  
 Launched : 1929  
 Displacement : 650 tons  
 Dimensions : 225 × 30 × 6 feet (mean), 7 (max.) feet  
 Guns : 1—3 inch AA., 1—40 mm. AA., 4 M.G.  
 Machinery : Triple expansion, 2 shafts. I.H.P. : 4,000 = 12 kts  
 Boilers : 2 Yarrow. Coal fired  
 Complement : 152

Note.—Reported to have been repaired after sinking in 1949.



1947, Official.

## MING CHUAN

Builders : Kiangnan Dock Co., Shanghai  
 Launched : 1929  
 Displacement : 464 tons  
 Dimensions : 176½ × 26 × 6 feet (mean, 6½ (max.) feet  
 Guns : Only 3 M.G. at present  
 Machinery : Triple expansion, 2 shafts. I.H.P. : 2,200 = 12 kts.  
 Boilers : 2 Yarrow  
 Coal : 280 tons  
 Complement : 119

## Motor Torpedo Boats.

## ex-KUAI 102

Displacement : 60 tons standard  
 Dimensions : 92 × 14 × 5 feet  
 Speed : 30 to 33 kts. (max.)  
 Complement : 14

Notes.—Built in Germany 1936-37. Whereabouts of ex-Nationalist Kuai 101 (same class as ex-Chinese Kuai 102) unknown. There are approximately 40 to 50 other motor torpedo boats of 40 ft. and 70 ft. length.

Patrol Craft  
SC Type.

KWANG KUO (ex-Japanese No. 223)  
 Displacement : 135 tons  
 Dimensions : 96 × 19 × 9 feet

HSIEN FENG (ex-Chinese Kao Ming, ex-Japanese.)

Note.—Built in 1941-43.

## Surveying Ships.

## CHUNG NING (ex-Japanese Takebu Maru)

Displacement : 200 tons  
 Dimensions : 115 × 16 × 6 feet  
 Speed : 10 kts.

## FUTING

Displacement : 160 tons  
 Dimensions : 90 × 20 × 8 feet  
 Speed : 11 kts.

## Landing Ships.

## CHING KANG SHAH

CHUNG 101 (ex-U.S.S. LST 804)

CHUNG 102 (ex-U.S.S. LST 629)

CHUNG 106 (ex-U.S.S. LST 589)

CHUNG 107 (ex-U.S.S. LST 1027)

CHUNG 110

CHUNG 111 (ex-U.S.S. LST 805)

CHUNG 116 (ex-U.S.S. LST 406)

CHUNG 122 (ex-Ch'ing Ling)

CHUNG 125

No. 16

No. 258

Landing Craft.  
13 LSM Type.

HUA 201 (ex-U.S.S. LSM 112)

HUA 202 (ex-U.S.S. LSM 248)

HUA 204 (ex-U.S.S. LSM 430)

HUA 205 (ex-U.S.S. LSM 336)

HUA 207 (ex-U.S.S. LSM 282)

HUA 208 (ex-U.S.S. LSM 42)

HUA 209 (ex-U.S.S. LSM 153)

HUA 211

HUA 212

CHUAN SHIH SHUI

HUANG HO or HANG PO (ex-Chinese Mei Sheng, ex-U.S.S. LSM 433)

HUAI HO (ex-Chinese Wan Fu)

YUN HO (ex-Chinese Wang Chung)

Note.—Some converted for minelaying.

## 15 LSIL Type.

MIN 301  
 MIN 303

MIN 306  
 MIN 311

MIN 312  
 MIN 313

MIN 319  
 MIN 321

MIN 325  
 MIN 331

CHU TIEN (ex-Chinese Lien Kuang, ex-U.S.S. LCI 517)

KU CHOU  
 ex-U.S.S. LCI 488

LIENG PI (ex-U.S.S. LCI 514)

YUNG KAN (ex-Chinese Lien Yung, ex-U.S.S. LCI 632)

## 2 LCU (ex-LCT) Type.

HO CHIEN (ex-U.S.S. LCT 515)

HO YUNG (ex-U.S.S. LCT 1171)

## River Gunboats.

CHIANG FENG (ex-Japanese Fushima)

Displacement :  
 Dimensions :  
 Guns :  
 Machinery :  
 Boilers :  
 Radius :  
 Complement :

373.6 tons, official Japanese figure, 320 tons standard  
 159½ (p.p.), 164 (w.l.), 165 (o.a.) × 32½ × 4½ feet  
 1—3.1 inch H.A. short cal., 8—25 mm. and other cal. AA.  
 2 turbines. S.H.P. : 2,200 = 16.7 kts. (designed)  
 2  
 1,496 miles at 14 kts.  
 64

CHIANG HSI (ex-Chinese Nan Chang, ex-Japanese Sumida)

Notes.—Both ships were built by Fujinagata, completed 15 July 1939 and 31 May 1940, respectively. Were the latest river gunboats in the Japanese Navy. Fushima bombed and bottomed at Anking 29 Nov. 1944, salvaged and towed to Shanghai for repairs and was moored there at the end of the war. Sumida at Shanghai at the end of the war ; her armament had been removed forl and batteries.

TUNG HSIN

Displacement :  
 Guns :  
 Speed :  
 Fuel :

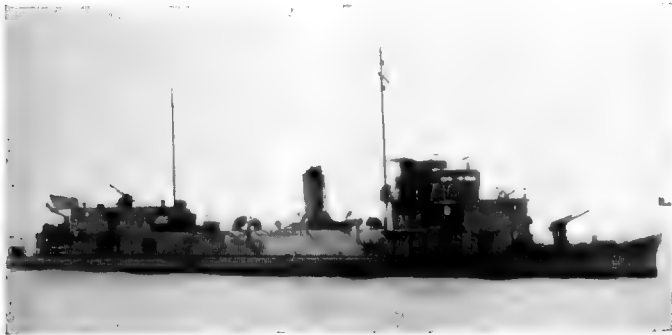
500 tons standard  
 1—3 inch, 4—47 mm.  
 11 to 15 kts. max.  
 Coal

TUNG TEH

Notes.—Captured by Communists in 1949.

CHINA (COMMUNIST)—River Gunboats

River Gunboats—continued.



1947 Official.

**CHIANG FENG** (ex-Kiang Shih, ex-Fushimi)  
Builders: Fujinagato Co., Osaka  
Launched: 1939  
Displacement: 350 tons  
Dimensions:  $193\frac{1}{2} \times 29\frac{1}{2} \times 5\frac{1}{2}$  feet  
Guns: 1—3 inch, 1—25 mm. AA.  
Machinery: Geared turbines. 2 shafts. S.H.P.: 2,300 — 17 kts.  
(actual speed, 12 kts.)  
Boilers: 2 Yarrow. Oil fuel  
Complement: 64  
Note.—Ex-Japanese.

**CHIANG HSI** (ex-Japanese Sumida)



1933, courtesy Messrs. Thornycroft.

**YING HAO** (ex-H.M.S. Sandpiper)  
Builders: John I. Thornycroft & Co. Ltd. Southampton  
Launched: 9 Jun., 1933  
Displacement: 185 tons  
Dimensions:  $160 \times 30\frac{1}{2} \times 2$  (mean) feet  
Guns: 1—3·7 inch howitzer, 9 smaller  
Machinery: 2 sets triple expansion. 2 shafts. I.H.P.: 600 = 11 kts.  
Boiler: 1, of Admiralty 3-drum type  
Complement: 40  
Notes.—Presented to China by the British Government in Feb. 1942. Now has mainmast.

**NAN CHANG** (ex-Ying Teh, ex-Lung Huan, ex-H.M.S. Falcon)  
Builders: Yarrow & Co., Ltd., Scotstoun, Glasgow  
Launched: 1931  
Displacement: 372 tons  
Dimensions:  $150 \times 28\frac{3}{4} \times 5$  (mean) feet  
Guns: 1—3·7 inch howitzer, 2—6 pdr., 10 M.G.  
Machinery: Parsons geared turbines. S.H.P.: 2,250 = 15 kts.  
Boilers: 2, of Admiralty 3-drum type  
Fuel: 84 tons oil  
Complement: 55  
Notes.—Presented to China by the British Government in Feb., 1942.



1947, Official.

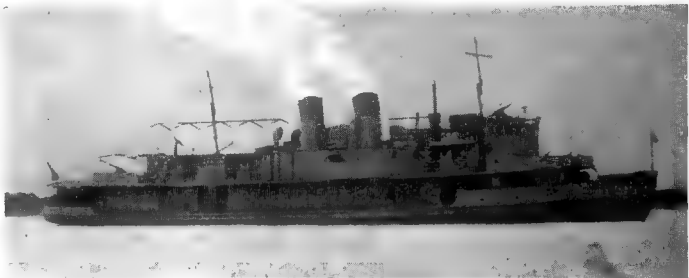
**YUNG AN** (ex-Futami) **YUNG PING** (ex-Atami)  
Displacement: 170 tons  
Dimensions:  $148\frac{1}{2} \times 22 \times 4\frac{3}{4}$  feet  
Guns: 3—3 inch, 3—25 mm. AA., 3 M.G.  
Machinery: 2 set triple expansion. 2 shafts. I.H.P.: 1,200 = 12 kts  
Boilers: 2 Kampon  
Oil fuel: 53 tons  
Complement: 77  
Notes.—Both launched 1929. Former Japanese river gunboats.



1932.

**YING SHAN** (ex-H.M.S. Gannet)  
Builders: Yarrow & Co., Ltd. Scotstoun, Glasgow  
Launched: 1927  
Displacement: 310 tons  
Dimensions:  $177$  (w.l.),  $184\frac{3}{4}$  (o.a.)  $\times 29 \times 3\frac{1}{2}$  feet  
Guns: 2—3 inch A.A., 8 M.G.  
Machinery: Geared turbines. Designed H.P.: 2,250 = 16 kts.  
Boilers: Yarrow  
Fuel: 60 tons oil  
Complement: 55  
Notes.—Designed by Yarrow. Presented to China by the British Government in Feb., 1942.

**FA KU** (ex-French Balny)  
Builders: Chantiers de Bretagne, Nantes  
Launched: 1920  
Completed: 1921  
Displacement: 201 tons  
Dimensions:  $167\frac{1}{2}$ , 179 (o.a.)  $\times 23 \times 5$  feet  
Guns: 1—3 inch AA., 2—1 pdr., 4 M.G.  
Machinery: Triple expansion. I.H.P.: 920 = 14 kts.  
Boilers: 2 Fouché water tube  
Fuel: 45 tons coal  
Range: 900 miles at 14 kts.  
Complement: 49



1947, Official.

**TAI YUAN.** **MEI YUAN** (ex-U.S.S. Tutuila) **TAI YUAN** (ex-Tatara, ex-U.S.S. Wake, ex-Guam)  
Displacement: 370 tons standard  
Dimensions:  $150$  (w.l.),  $\times 159\frac{1}{2}$  (o.a.)  $\times 27 \times 5\frac{1}{4}$  (mean—fresh water), 6 (max.) feet  
Guns: 2—3 inch, 23 cal., 10 M.G.  
Machinery: Triple expansion. I.H.P.: 1,950 = 12 kts.  
Oil fuel: 75 tons  
Complement: 70  
Notes. Launched 14 June and 28 May 1927, respectively. Mei Yuan was presented to China by the U.S. Government in March 1942. Sister ship was recovered from Japanese hands and presented to China in 1946.

**CHANG TEH** (ex-Seta)  
Displacement: 305 tons  
Dimensions:  $180 \times 27 \times 3\frac{1}{2}$  feet  
Guns: 2—3 inch, 6 M.G.  
Machinery: Triple expansion. 2 shafts. I.H.P.: 2,100 — 14 kts.  
Boilers: 2 Kampon  
Oil fuel: 85 tons  
Complement: 82  
Notes.—Japanese prize, built at Harima yard. Launched 1923.



1947, Official.

**AN TUNG** (ex-Japanese Ataka, ex-Nakoso)  
Launched: April, 1922  
Displacement: 727 tons  
Dimensions:  $222 \times 32 \times 7\frac{1}{4}$  feet  
Guns: 2—3 inch, 5—25 mm., 6 M.G.  
Machinery: Triple expansion. I.H.P.: 1,700 = 11 to 14 kts.  
Boilers: 2 Kampon

**KIANG KUN** (ex-Japanese *Narumi*, ex-Italian *Ermanno Carlotto*)

Builders : Shanghai Dock & Engineering Co.  
 Launched : 1921  
 Completed : 1921  
 Displacement : 180 tons standard  
 Dimensions : 160 × 24½ × 2½ feet  
 Guns : 2—3 inch, 6 M.G.  
 Machinery : Designed I.H.P. : 1,100 = 14 kts. (max.)  
 Boilers : 2 Yarrow  
 Oil : 56 tons  
 Complement : 60

Notes.—Shallow draught river gunboat. Twin screws in tunnels.



1947, Official.

**YEN AN** (ex-Yung Chi, ex-Japanese *Asuka*, ex-Yung Chi)

Builders : Kiangnan Dock Co., Shanghai  
 Launched : 1915  
 Displacement : 860 tons  
 Dimensions : 205 (pp.), 215½ (o.a.) × 29½ × 11½ feet (max.)  
 Guns : 2—3 inch, 4 M.G.  
 Machinery : Triple expansion, 2 shafts. I.H.P. : 1,350 = 11 kts.  
 Boilers : 2 cylindrical  
 Coal : 156 tons  
 Complement : 143

Note.—Sunk in 1945 and later salvaged.



1947, Official.

**HO HSEUH** (ex-Chinese Yung Ch'i, ex-Japanese *Toba*)

Launched : 1911  
 Displacement : 215 tons  
 Dimensions : 180 × 27 × 2½ feet (mean), 4 feet (max.)  
 Guns : 3—3 inch, 3—25 mm. AA., 3 M.G.  
 Machinery : Triple expansion, 2 shafts. I.H.P. : 900 = 9 kts.  
 Boilers : 2 Kampon  
 Coal : 80 tons  
 Complement : 86

**WU FENG** ex-Japanese *Maiko*, (ex-Portuguese *Macau*)

Builders : Yarrow & Co., Ltd., Glasgow  
 Launched : 1909  
 Displacement : 100 tons  
 Dimensions : 120 (o.a.) × 20 × 2 feet  
 Guns : 2—6 pdr., 3 M.G.  
 Machinery : H.P. : 250 = 11.8 kts.  
 Boilers : 1 Yarrow  
 Complement : 24

**CHU TUNG**

Displacement : 740 tons  
 Dimensions : 200 × 30 × 8 feet  
 Guns : 2—3 inch, 5—25 mm. AA.  
 Machinery : Triple expansion, 2 shafts. I.H.P. : 1,350 = 11 kts.  
 Boilers : Yarrow  
 Coal : 150 tons  
 Complement : 117

Notes.—Built by Kawasaki Co., Kobe. Launched 1906. Sister ship of *Chu Kwan* (Nationalist)

**CHIANG YUAN**

Builders : Kawasaki Co., Kobe  
 Launched : 1905  
 Displacement : 550 tons  
 Dimensions : 170 (pp.), 180 (o.a.) × 28 × 7 feet  
 Guns : 1—20 mm. AA.  
 Machinery : Triple expansion, 2 shafts. I.H.P. : 950 = 9 kts.  
 Boilers : Watertube  
 Coal : 113 tons  
 Complement : 127

**Motor Gunboats.****3 Ex-U.S. Type.**

Ex-PGM 12      Ex-PGM 14      KAN TANG (ex-PGM 15)  
 Displacement : 348 tons (trial)  
 Machinery : G.M. Diesel. B.H.P. : 2,800 = 20 kts.

**Motor Launches.**

Ex-ML 1033      Ex-ML 1058      Ex-ML 1068      Ex-ML 1405  
 Ex-ML 1047      Ex-ML 1059      Ex-ML 1390      Ex-ML 1406

Note.—Acquired from Great Britain.

**Supply Ships.**

Ex-U.S. Army FS 146      Ex-U.S. Army FS —  
 Ex-U.S. Army FS 155      Ex-U.S. Army FS —

**TA CHEN** (ex-U.S.)

Displacement : 1,000 tons standard  
 Length : 175 (o.a.)

**Troop Transport.**

CHIAO JEN  
 Measurement : 1,873 tons

Note.—Formerly Chinese Nationalist troop transport. Mined July 28, 1949. Suffered machinery derangement but no hull damage. After survey crew hoisted Communist flag and took her to Canton.

**Coastal Minesweepers.****Ex-U.S. Type**

Ex-YMS Type.

1944, U.S. Navy, Official.

Ex-YMS 339      Ex-YMS 346      Ex-YMS 367      Ex-YMS 393      Ex-YMS 2017

Displacement : 215 tons  
 Dimensions : 136 × 24½ × 6 feet  
 Guns : 1—3 inch, 2—20 mm., 2 D.C.T.  
 Machinery : 2 G.M. Diesels. B.H.P. : 1,000 = 13 kts.  
 Complement : 50

Notes.—Built of wood in U.S.A., 1942-43 and transferred to Chinese Navy, 1948.

**Ex-Japanese Type**

Ex-No. 4      Ex-No. 19      Ex-No. 22      No. 201 (ex-No. 14)

Displacement : 215 to 222 tons  
 Dimensions : 97½ (o.a.) × 19½ × 7½ (max.) feet  
 Guns : 1—3.1 inch, 4—25 mm. (No. 214, 1—40 mm., 1—25 mm., 2—13 mm., 3—7.7 mm.)  
 Machinery : 1 Diesel. B.H.P. : 300 = 9.5 kts.  
 Radius : 1,700 miles at 9.5 kts.

Notes.—Ex-Japanese auxiliary minesweepers. Trawler type. No. 201 completed 1943, delivered to China at Tsingtau 3 Oct. 1947, taken over by Communists.

**Repair Ship.**

HSING AN (ex-Achilles, ARL 41, ex-LST 455)

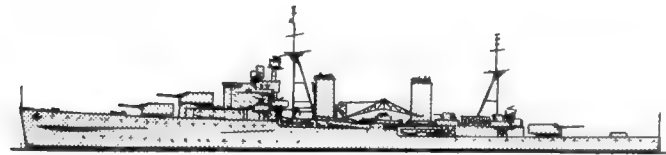
Launched : 17 Oct., 1942  
 Displacement : 4,000 tons full load  
 Dimensions : 316 (w.l.), 328 (o.a.) × 50 × 11 feet  
 Guns : 1—3 inch, 8—40 mm. AA.  
 Machinery : Diesel-electric, 2 shafts. B.H.P. : 1,800 = 11 kts.

Notes.—Ex-U.S. Burned and grounded in 1949, salvaged. (Another vessel of this type was to have been acquired by Nationalists.)



Scale : 150 feet = 1 inch

COMMUNIST



VICTORY (ex-CHUNGKING).



CHI AN, SHEN YANG.



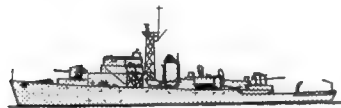
HUI AN.



NAN CHANG.



CHANG PEI.



KUANG CHOU.



CHANG SHA, CHI NAN,  
SI AN, WU CHANG.



FEN YANG.



TAN YANG.

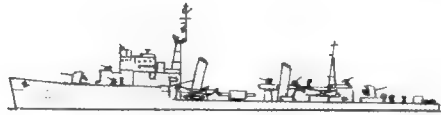


HAN YANG, LO YANG.

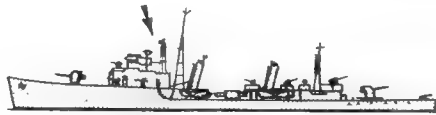


SHEN YANG.

NATIONALIST



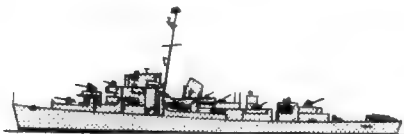
HUA YANG, HSIN YANG.



HENG YANG, HUI YANG.



TAI CHAO, TAI HO, TAI HU,  
TAI TSANG.



TAI KANG, TAI PING.



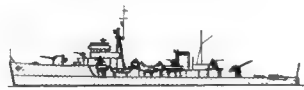
CHENGAN.



LIN AN.



CHEN AN, TAI AN, TSI AN,  
TUNG AN.



CHAO AN, JUI AN,  
CHANG AN, SWE AN.



YUNG CHING.



KAO AN, TE AN.



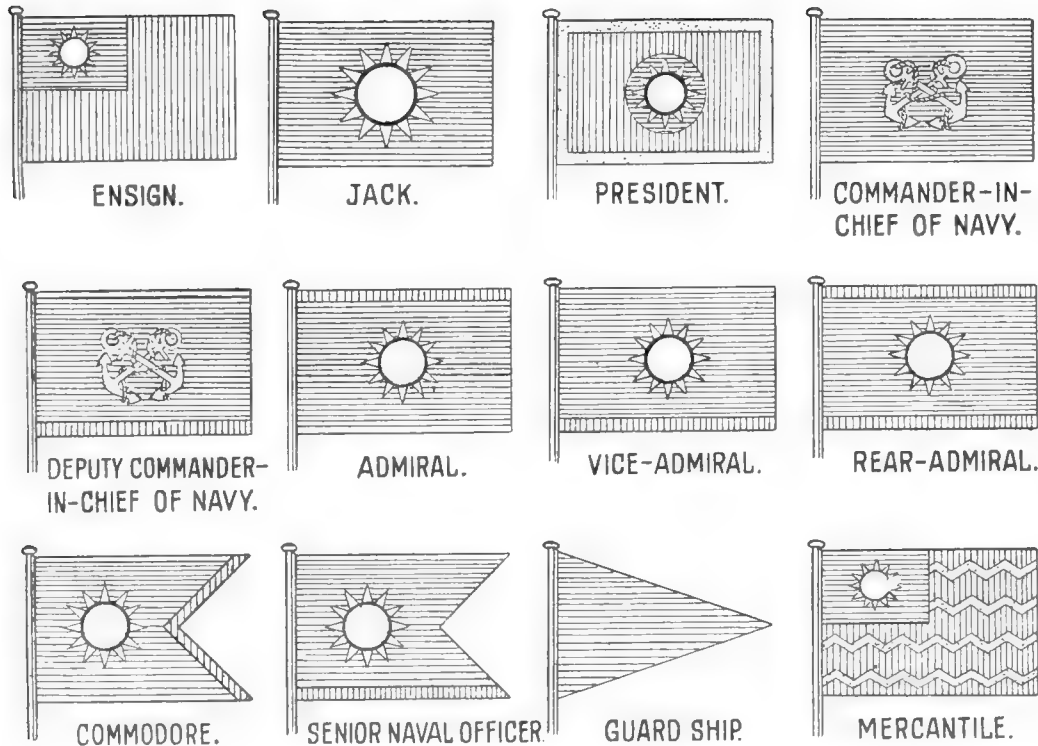
YI HSIEN.



WU I.

# CHINA (NATIONALIST)

## Flags.



## Administration.

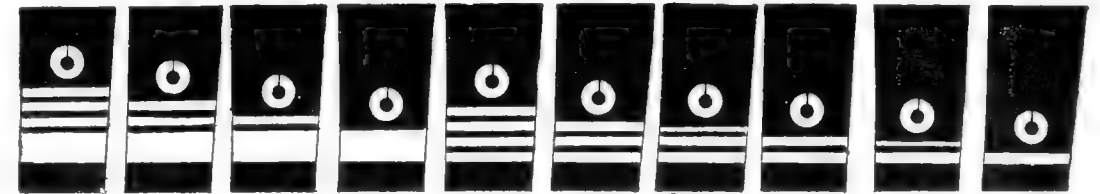
Commander in Chief, Naval Forces : Vice-Admiral Chi Chuang Ma.  
 Chief of Naval Staff : Rear-Admiral T. T. Wang.  
 Naval Attaché in Washington : Captain Hoh-Tu Liu, C.N.

## Personnel.

About 50,000 officers and ratings.

(including 11,000 operational personnel, 10,000 marines, and 20,000 civilians and military under training, total 41,000 in Feb. 1954).

## Uniforms.



Colour between stripes : *Engineers*, None ; *Medical Officers*, Scarlet ; *Supply Officers*, Blue ; *Naval Constructors*, Pink ; *Navigating Officers*, Light Indigo Blue ; *Ordnance*, Pink ; *Wireless*, Mauve ; *Bandmasters*, Orange ; *Judge Advocates*, Grey ; *Hydrographic Officers*, Purple ; *Civilian Officers*, White. All these branches *without* the curl or emblem over top stripe except *Engineers*. *Aviation*, no colour between stripes, but gold eagle replaces emblem above stripe.

## Division of Chinese Warships.

Division of Chinese warships reported to be as follows :

Nationalists	Communists
9 Destroyers	1 Light Cruiser
20 Frigates	10 Frigates
3 Gunboats	5 Gunboats
13 Fleet Minesweepers	1 Patrol Escort (PCE)
4 Patrol Vessels	2 Submarine Chasers (SC)
1 Minelayer	1 Minesweeper
13 L.S.T.s.	21 River Gunboats
8 L.S.M.s.	45 Motor Torpedo Boats
6 L.C.I.L.s.	5 Coastal Minesweepers
7 L.C.U.s.	12 L.S.T.s.
1 Repair Ship	13 L.S.M.s.
7 Transports	15 L.C.I.L.s.
3 Oilers	2 L.C.U.s. (ex-L.C.T.s.)

Chinese Nationalist ships' names are prefaced by "R.C.N." (Republic of China Navy). Chinese Nationalist naval vessels are assigned a "block" number which is painted on the bow and serves as a means of identification and classification.

## Ex-Japanese Ships.

Most of the particulars given of ex-Japanese ships are those obtaining at the end of the Second World War.

## Mercantile Marine.

Lloyd's Register appendix, 1954 : 322 vessels of 659,006 tons gross.

CHINA (NATIONALIST)—Destroyers

7 Ex-Japanese Types

General Notes.—These seven ex-Japanese destroyers were taken over by the Chinese Navy in 1947 in the distribution of surrendered enemy tonnage. Original armament and particulars are as above. Unarmed in 1949, and in very bad state, able neither to steam nor steer. This applies to several other ex-Japanese ships. Some are reported to be rearmed with 4-inch guns taken over from Japanese coastal defence points.



Added 1953, Hajime Fukaya.

FEN YANG (ex-Yoitsuki)

Builders :	Uraga Dock Company, Limited
Laid down :	25 Aug. 1943
Launched :	25 Sep. 1944
Completed :	31 Jan. 1945
Displacement :	2,701 tons standard (3,485 tons full load)
Dimensions :	413½ (p.p.), 433 (w.l.), 440½ (o.a.) × 38 × 13½ feet
Guns :	8—4 inch AA., 48—25 mm.
Tubes :	4—24 inch (quadrupled), 8 torpedoes. D.C. : 72
Machinery :	2 turbines. S.H.P. : 52,000 = 33 kts.
Boilers :	3 Kampon

Notes.—"Akizuki" class. Storage for 72 depth charges. Laid up, non-operational.



TAN YANG

Photo Jan. 1954, Lieut. Charles S. Bird, U.S.N.

TAN YANG (ex-Yukikaze)

Launched	1939
Displacement :	2,490 tons
Dimensions :	388 (o.a.) × 35½ × 12½ feet
Guns :	2—5 inch, (Japanese type twin mount forward); 4—4.7 inch, (Japanese type twin mounts aft); 12—25 mm. (Japanese twin mounts)
Machinery :	Geared turbines. S.H.P. : 52,000 = 35 kts. (designed). See notes.
Boilers :	3 Kampon

Notes.—Built at Sasebo, Japan, in 1940. Previously reported unarmed, not commissioned but operational, is now the largest combatant unit in the Nationalist Navy. Main battery effective only for surface bombardment. During trials in Feb. 1953, 27.5 knots was reached, and 26 knots maintained for an hour. Ship had undergone extensive overhaul during previous two years. Depth charge racks are to be installed. Pendant No. 12.

HENG YANG (ex-Kaede)

Displacement :	1,530 tons
Dimensions :	302½ (p.p.), 321½ (w.l.), 328 (o.a.) × 30½ × 11 feet
Guns :	3—5 inch, 24—25 mm. (31—25 mm. AA. guns can be mounted)
Tubes :	4—24 inch (quadrupled)
Machinery :	2 Turbines. S.H.P. : 19,000 = 27.8 kts.
Complement :	206

Notes.—Matsu class. Both launched 1944. Above is original Japanese armament. Both ships now rearmed, but non-operational.

HUI YANG (ex-Sugi)



HUA YANG

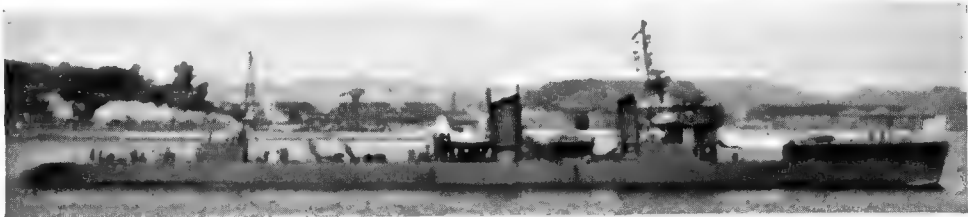
Added 1953, Hajime Fukaya.

15 HSIN YANG (ex-Hatsume, 1945)

Displacement :	1,580 tons
Dimensions :	302½ (p.p.), 321½ (w.l.), 328 (o.a.) × 30½ × 11 feet
Guns :	3—5 inch, 24—25 mm. Hsin Yang 2—4.7 inch, 8—25 mm. AA. 4—13 mm. AA.
Tubes :	4—24 inch (quadrupled), 4 torpedoes. D.C. : 60 (Hua Yang 36)
Machinery :	Turbines. S.H.P. : 19,000 = 27.8 kts.
Boilers :	2

Notes.—Modified Matsu class. Launch dates above. Hua Yang built at Yokosuka, laid down 31 July 1944 and completed 8 Feb. 1945. Recently in Pescadores Islands, inoperative and greatly deteriorated under Nationalist control.

HUA YANG (ex-Tsuta, 2 Nov. 1944)



Added 1953, Hajime Fukaya.

SHEN YANG (ex-Namikaze)

Builders :	Maizura
Laid down :	7 Nov. 1921
Launched :	24 June 1922
Completed :	11 Nov. 1922
Displacement :	1,350 tons standard (1,700 tons full load)
Dimensions :	320 (p.p.), 327½ (w.l.), 336½ (o.a.) × 29½ × 11½ feet
Guns :	1—4.7 inch, 20—25 mm. AA., 8—13 mm.
Tubes :	2 Kaiten
Machinery :	Geared turbines. S.H.P. : 22,000 = 34 kts. (original) now 28 kts.
Boilers :	3 Kampon

Notes.—Modified "Minekaze" class. Thin fore-funnel as first boiler was removed. Four-strutted mainmast. Raked down stern. Damaged in Northern waters in 1944 and repaired and reconstructed as "Kaiten" (Human Torpedo) Carrier. Laid up, non-operational

2 Ex-U.S. Type

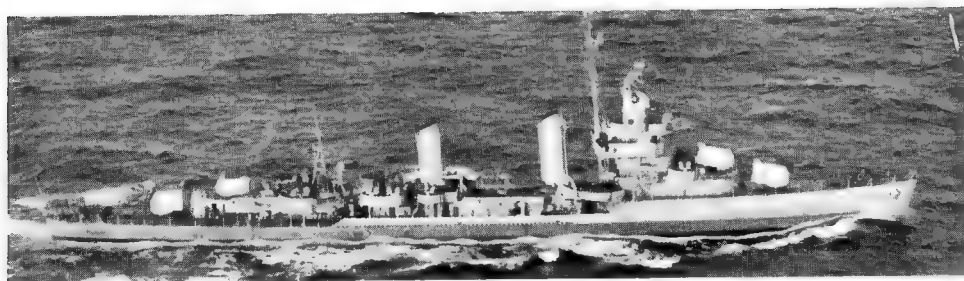
HAN-YANG (ex-U.S.S. Hilary P. Jones, DD 427)

Displacement :	1,620 tons (2,450 tons full load)
Dimensions :	348½ (o.a.) × 35½ × 18 (max.) feet
Guns :	4—5 inch 38 cal.; 4—40 mm. AA.; 7—20 mm. AA.
Tubes :	5—21 inch (quintupled)
Machinery :	Geared turbines. 2 shafts. S.H.P. : 50,000 = 36.5 kts.
Boilers :	4 high pressure

Notes.—Presented by U.S.A. Transferred to Nationalist China at Charleston, South Carolina, 26 Feb. 1954. Photo top left next page.

LO-YANG (ex-U.S.S. Benson, DD 421)

Name	Builders	Laid down	Launched	Completed
Han Yang	Philadelphia Navy Yard	16 Nov. 1938	14 Dec. 1939	Dec. 1940
Lo Yang	Bethlehem (Quincy)	16 May 1938	15 Nov. 1939	25 July 1940



LO YANG (see bottom right, preceding page)

Added 1954, Official

## Frigates.

### 6 Ex-U.S. Escort Destroyer Types.

**26 TAI CHAO** (ex-U.S.S. Carter, DE 112)  
**23 TAI HO** (ex-U.S.S. Thomas, DE 102)

**25 TAI HU** (ex-U.S.S. Breeman, DE 104)  
**24 TAI TSANG** (ex-U.S.S. Bostwick, DE 103)

Displacement : 1,240 tons (1,900 tons full load)  
 Dimensions : 306 (o.a.) × 36½ × 12 (max.) feet  
 Guns : 4—3 inch, 50 cal. d.p., 4—40 mm. AA., 10—20 mm. AA. and D.C.T.  
 Tubes : 3—21 inch in triple mounting  
 Machinery : Diesel electric, 2 shafts. B.H.P. : 6,000 = 21 kts. (19 kts. in service)  
 Complement : 220

Notes.—Transferred 31 Dec. 1948. Another ship of this type, ex-Jordon, reported acquired. Two underwent overhaul in Japanese yards, late 1952.



TAI-KANG.

Added 1949.

**21 TAI KANG** (ex-U.S.S. Wyffels, DE 6)

**22 TAI PING** (ex-U.S.S. Decker, DE 47)

Displacement : 1,150 tons (1,430 tons full load)  
 Dimensions : 283½ (w.l.), 289½ (o.a.) × 35 × 10½ feet  
 Guns : 3—3 inch, 50 cal. dual purpose, 4—40 mm. AA., 11—20 mm. AA., 9 D.C.T.  
 Machinery : Diesel with electric drive, 2 shafts. H.P. : 6,000 = 21.5 kts.  
 Complement : 212

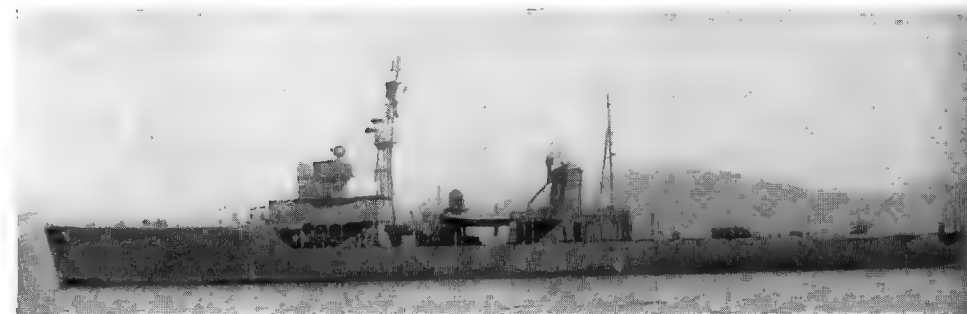
Notes.—Tai-Ping and Tai-Kang, built at Philadelphia and Boston Navy Yards respectively, and delivered to China in 1946.

Pendant	Name	Launched	Completed
26	Tai Chao	29 Feb. 1944	2 May 1944
23	Tai Ho	31 July 1943	21 Nov. 1943
25	Tai Hu	1943	12 Dec. 1943
21	Tai Kang	1943	21 April 1943
22	Tai Ping	1943	3 May 1943
24	Tai Tsang	30 Aug. 1943	1 Dec. 1943

## Destroyers, Frigates—CHINA (NATIONALIST)

### Frigates—continued.

#### 2 Ex-Japanese Escort Destroyer Types.



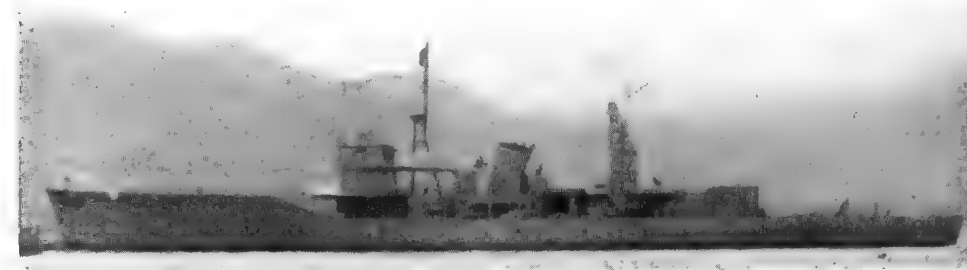
Added 1953, Hajime Fukaya.

**76 CHENGAN** (ex-Heueh Fen, ex-Yashiro)

Builders : Hitachi (Sakurajima Works)  
 Laid down : 8 Nov. 1943  
 Launched : 16 Feb. 1944  
 Completed : 10 May 1945

Displacement : 1,020 tons  
 Dimensions : 258½ (o.a.) × 30 × 10 feet  
 Guns : 2—4.7 inch, 6 M.G.  
 Machinery : 2 Diesels, B.H.P. : 4,200 = 19.5 kts.  
 Radius : 5,000 miles at 16 kts.  
 Complement : 150

Notes.—Ex-Japanese Type A or "Mikura" class. Sister ship Hui An is Communist.



Added 1953, Hajime Fukaya.

**77 LIN AN** (ex-Tsushima)

Builders : Tsurumi  
 Laid down : 20 June 1942  
 Launched : 20 Mar. 1943  
 Completed : 30 July 1943

Displacement : 1,020 tons  
 Dimensions : 255 (o.a.) × 30 × 10 feet  
 Guns : 1—4.7 inch d.p. ; 1—3 inch, 50 cal. ; 8—25 mm.  
 A/S weapons : 26 D.C.  
 Machinery : Diesel, 2 shafts. B.H.P. : 4,200 = 19.7 kts.  
 Radius : 8,000 miles at 16 kts.  
 Complement : 147

Notes.—Ex-Japanese Type A or "Etorofu" class. Believed fitted for minelaying. For sister ship Chang Pei, see Communist China. Pendant No. 77.

CHINA (NATIONALIST)—Frigates

Frigates—continued.

1 Ex-Japanese Sloop Type.



1947, Official.

63 YI HSIEN (ex-Yat Sen, ex-Atada)

Builders : Kiangnan Dock Co., Shanghai  
Launched 1930

Displacement : 1,650 tons  
Dimensions : 270 (o.a.), 252 (pp.) × 34 × 11 feet (mean), 12½ feet (max.)  
Guns : 1—4.7 inch, 5—98 M.G.  
Machinery : Triple expansion, 2 shafts. I.H.P. : 4,000 = 16 kts.  
Boilers : Yarrow  
Coal : 280 tons  
Complement : 182

Notes.—Ex-Japanese sloop. Poop deck has been removed.

2 Ex-Canadian Corvette Type

62 KAO-AN (ex-Chiu Chin, ex-Tillsonburg, ex-Pembroke Castle)

61 TE-AN (ex-Hsi Lin, ex-Orangeville, ex-Hedingham Castle)

Displacement : 1,100 tons (1,580 tons full load)  
Dimensions : 252 (o.a.) × 36½ × 15½ (max.) feet  
Guns : 1—4.7 inch d.p.; 1—3 inch; 2—40 mm. (Te An 3—40 mm.); 2—25 mm., 4—20 mm.  
Machinery : Triple expansion. I.H.P. : 2,800 = 16.5 kts.  
Boilers : 2 three-drum type  
Oil fuel : 480 tons

Notes.—There is some doubt about status and names of these vessels. Names Kao-An and Te-An reported in June 1951, but also reported under their former names Chiu Chin and Hsi Lin. Reconverted from merchant ships. Taken over by Navy and rearmed.

Name	Builders	Laid down	Launched	Completed
Kao-An	Ferguson Bros., Ltd. Glasgow	3 Jun., 1943	12 Feb., 1944	17 Jul., 1944
Te-An	Henry Robb, Ltd. Leith	23 Jul., 1943	26 Jan., 1944	10 May, 1944

1 Ex-Japanese Minelaying Type.

75 YUNG CHING (ex-Saishu)

Displacement : 750 tons  
Dimensions : 231 (pp.), 240½ (w.l.), 246 (o.a.) × 26 × 8½ feet  
Guns : 1—3 inch, 50 cal.; 1—40 mm.; 7—25 mm.; 1—20 mm.  
Mines : 120 capacity  
Machinery : 2 Diesels. B.H.P. 3,600  
Speed : 20 kts.

Notes.—Japanese prize, acquired in 1947. Formerly rated as a light minelayer. Now rated as DE escort.

Frigates—continued.

8 Ex-Japanese Corvette Types.



HEIN AN.

Added 1953, Hajime Fukaya.

74 CHAO AN (ex-No. 107)

73 JUI AN

CHANG AN (ex-Hein An, ex-No. 205)

SWE AN (ex-Ying Kou, ex-No. 67)

Displacement : 810 tons  
Dimensions : 221½ (o.a.) × 28 × 9½ feet  
Guns : 2—4.7 inch, 10—25 mm. (Swe An 1—4.7 inch, 1—3 inch, 8 M.G.), D.D. 120  
Machinery : Diesel. 2 shafts. B.H.P. : 1,900 = 16.5 kts.  
Radius : 6,500 miles at 14 kts.  
Complement : 130

Notes.—Ex-Japanese, Type C or No. 1 Type. Handed over disarmed. Chang An and Swe An laid up, non-operational. Chang An built by Nagata Iron Works, laid down 10 May 1944, launched 15 Aug. 1944, completed 30 Oct. 1944.

TSING PAI (ex-Liuo Hai, ex-Japanese escort No. 215) has been assigned to the Army.



TUNG AN.

Added 1953, Hajime Fukaya.

72 CHENG AN (ex-No. 40)

71 TAI AN (ex-No. 104)

TSI NAN

TUNG AN (ex-No. 192)

Displacement : 900 tons (1,300 tons full load)  
Dimensions : 228 (o.a.) × 28½ × 10 feet  
Guns : See notes.  
Machinery : Turbine. S.H.P. : 2,500 = 17.5 kts.  
Boilers : 2 mixed firing  
Radius : 4,500 miles at 14 kts.  
Complement : 145

Notes.—Ex-Japanese. Type D or No. 2 Type. All handed over disarmed. Cheng An, 2—4.7 inch, 8 M.G. Tung An built by Mitsubishi, Nagasaki, laid down 5 Dec. 1944, launched 30 Jan. 1945, completed 28 Feb. 1945.



### Escort Patrol Vessels.

2 Ex-U.S. PCE Type.



YUNG TAI.

1947, Official.

42 WEIYUAN (ex-PCE 869, 6 Feb., 1943)

41 YUNG TAI (ex-U.S.S. PCE 867, 3 Dec., 1942)

Displacement : 600 tons (903 tons full load)  
Dimensions : 180 (w.l.), 184½ (o.a.) × 33 × 9½ feet (max.)  
Guns : 1—3 inch D.P., 3—40 mm. AA., 6—20 mm. AA., 4 D.C.T.  
Machinery : Diesel, 2 shafts. B.H.P. : 1,800 = 17 kts.

Notes.—Launch dates above. Built by Albina Engine and Machinery Works, Portland, Ore.



1947, Official.

64 HSIEN NING (ex-Japanese Okitsu, ex-Italian Lepanto)

Launched : 22 May, 1927  
Displacement : 615 tons (848 tons full load)  
Dimensions : 204 × 28½ × 8½ feet  
Guns : 3—3 inch, 2—40 mm. AA., 4—20 mm.  
Machinery : Triple expansion, 2 shafts. I.H.P. : 1,500 = 13 kts.  
Boilers : 2 watertube  
Coal : 145 tons  
Complement : 184

### Patrol Vessels.

14 Ex-U.S. PC Type.

84 CHIALING (ex-U.S.S. PC 1247, 7 Aug. 1943)

85 HWANGPU (ex-U.S.S. PC 492)

WU SUNG (ex-PC 490, 18 Oct. 1941)

CHIEN TANG (ex-PC 1549, Apr. 1944)

Ex-PC 786  
Ex-PC 1078

Ex-PC 1182  
Ex-PC 1208

Ex-PC 1232  
Ex-PC 1283

Ex-PC 1254  
Ex-PC 1262

Ex-PCC 1168  
Ex-PGM 31 (ex-PC 1567)

{ From U.S.A. 1954

Displacement : 280 tons (450 tons full load)  
Dimensions : 173½ (o.a.) × 23 × 10½ (max.) feet  
Guns : 1—3 inch, 50 cal., 1—40 mm. AA., 5—20 mm. AA.  
Machinery : Diesel, B.H.P. : 2,880 = 20 kts.

Notes.—Launch dates above. Chien Tang and Wu Sung reported being discarded.

### Minesweepers.

13 Ex-U.S. AM Type.



YUNG SHUN.

1947, Official.

46 YUNG NING (ex-U.S.S. Lucid, June 5, 1943)

50 YUNG FENG (ex-U.S.S. Prime)

47 YUNG CHIA (ex-U.S.S. Implicit, Sept. 6, 1943)

53 YUNG HWO (ex-U.S.S. Delegate)

43 YUNG SHENG (ex-U.S.S. AM 257)

51 YUNG CHANG (ex-U.S.S. Refresh, April 12, 1944)

44 YUNG SHUN (ex-U.S.S. Magnet, June 5, 1943)

45 YUNG TING (ex-U.S.S. Logic, April 10, 1943)

52 YUNG CHUN (ex-U.S.S. Gavia, 18 Sept. 1943)

48 YUNG HSIU (ex-U.S.S. Pinnacle, Sept. 11, 1943)

49 YUNG SHOU (ex-U.S.S. Pivot, Nov. 11, 1943)

54 YUNG KANG (ex-U.S.S. AM 225)

Displacement : 625 tons (945 tons full load)  
Dimensions : 180 (w.l.), 184½ (o.a.) × 33 × 9½ feet (max.)  
Guns : 1—3 inch D.P., 3—40 mm. AA., 6—20 mm. AA.  
Machinery : Diesel, 2 shafts. B.H.P. : 1,710 = 14.5 kts.  
Complement : 104

Notes.—All of AM type acquired from U.S. Navy. Launch dates above. Yung Feng fitted for minelaying with tracks on stern.

44 YUN HSING (ex-U.S.S. Embattle, AM 226) serves as a maritime customs vessel.

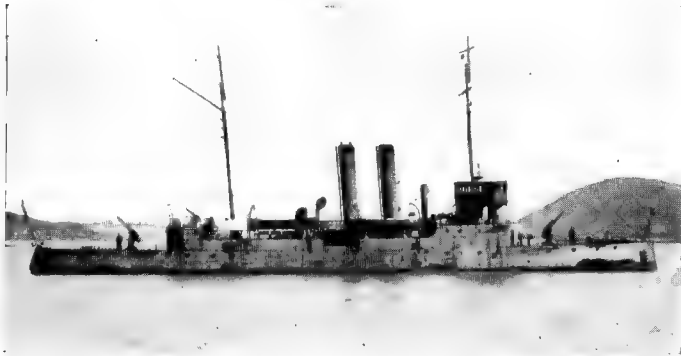
CHINA (NATIONALIST)—Gunboats, Coastal Craft, Transports

Minelayer.

**CHIEH 29** (ex-Kuroshima)  
Displacement : 420 tons  
Dimensions : 150 (o.a.) × 25 × 7½ feet  
Guns : 1—3.1 inch, 2—13 mm. M.G.  
Mines : 120  
Machinery : 2 reciprocating engines : I.H.P. : 600 = 12.8 kts.  
Boilers : 1  
Fuel : Coal  
Note.—Japanese prize, acquired in 1947 Rated as Auxiliary Minelayer.

Gunboats.

**YUNG HSIANG**  
Builders : Kawasaki Co., Kobe, Japan  
Launched : 1912  
Displacement : 830 tons  
Dimensions : 205 (pp.), 215 (o.a.) × 29½ × 8 feet  
Guns : 2—3 inch, 5—25 mm. AA., 6 M.G.  
Machinery : Triple expansion. 2 shafts. I.H.P. : 1,350 = 11 kts.  
Coal : 170 tons  
Complement : 144



1947, Official.

**65 CHU KWAN**  
Builders : Kawasaki Co., Kobe  
Launched : 1907  
Displacement : 740 tons  
Dimensions : 200 × 30 × 8 feet  
Guns : 2—3 inch, 5—25 mm. AA.  
Machinery : Triple expansion. 2 shafts. I.H.P. : 1,350 = 11 kts.  
Boilers : Yarrow  
Fuel : 150 tons coal  
Complement : 117  
Notes.—Sister ship *Chu Tung* is Chinese Communist.

Patrol Craft.

Note.—Small patrol vessels YP 1-13, 15-18 (YP 5-11 of similar type), YP 101, 102, 104, 107-109 111-116, all named P'AO.

**412 CHIANG P'ING**

3 SC Type.

**CHU CHIEN** (SC 101) **CHU CH'EN** (SC 102) **CHU CH'EN** (SC 103)

6 Ex-HDML Type

**1 FANG I** (ex- ML 1033) **6 FANG LIU** (ex-ML 1390)  
**2 FANG SAN** (ex-ML 1047) **5 FANG CHI** (ex-ML 1405)  
**4 FANG SEU** (ex-ML 1059) **7 FANG PA**  
Displacement : 46 tons standard  
Dimensions : 72 × 15½ × 4½ feet  
Guns : 1—40 mm., 1—20 mm., 4 M.G.  
Machinery : 2 Diesels. B.H.P. : 320 = 11 kts.  
Notes.—Fang 3 and Fang 8 sunk 1950.

Motor Gunboats.

3 Ex-U.S. Type.

**81 PAO YING** (ex-U.S.S. PGM 20) **83 TUNG TING** (ex-U.S.S. PGM 13)  
**82 HUNG TSE** (ex-U.S.S. PGM 26)  
Displacement : 280 tons  
Dimensions : 174 (o.a.) × 23 × 6½ feet  
Guns : 1—3 inch  
Machinery : 2 Diesel. B.H.P. : 3,600 = 20 kts.  
Complement : 80

Notes.—All built by Consolidated Shipbuilding Corp., Morris Heights, N.Y. *Pao Ying* launched 7 May 1944, *Hung Tse* 29 Sep. 1944.

Ex-Japanese Type.



No. 39. 1950, Lieut. A. W. Sugden, R.N.

Auxiliary Motor Minesweepers.

**402 CHIANG YUNG** (ex-No. 19)  
Displacement : 222 tons  
Dimensions : 98 × 19½ × 7½ feet  
Guns : 2—40 mm., 2—25 mm., 2 M.G.  
Machinery : Diesel  
Speed : 9 kts.

**401 CHIANG I**  
Note.—Former Japanese auxiliary minesweepers.

Surveying Ships.

**351 CHING TIEN**  
Displacement : 535 tons  
Dimensions : 150 × 31 × 9½ feet  
Guns : 2—25 mm., 7 M.G.  
Machinery : Reciprocating engines (coal) = 10 kts.  
Complement : 90

Note.—Built in China 1939.

**CHIAO SHAN**  
Displacement : 170 tons  
Guns : 3 M.G.

Submarine Chasers.

**87 FU LING** (ex-No. 9, ex-Hai Ta, ex-No. 402)  
Displacement : 309 tons  
Dimensions : 184½ (o.a.) × 18½ × 7 feet  
Guns : 2—40 mm., 3—25 mm., D.C. 36  
Machinery : Diesel. 2 shafts. B.H.P. : 2,600 = 19 kts.

**86 YA LUNG** (ex-No. 49, ex-Hai Hung, SC 401)  
Displacement : 460 tons  
Dimensions : 167½ (o.a.) × 22 × 9 feet  
Guns : 1—3.1 inch (8 cm.), 3—25 mm., 2—13 mm., D.C. 36  
Machinery : Diesel. 2 shafts. B.H.P. : 1,700 = 16 kts.

Note.—Ex-Japanese.

**101 CHU CHIEN** (ex-SC 704) **103 CHU CHIEN** (ex-SC 698)  
**102 CHU CHIEN** (ex-SC 708)  
Ex-SC 518 Ex-SC 648 Ex-SC 722 Ex-SC 735  
Ex-SC 637 Ex-SC 703 Ex-SC 723

Transports.

**311 WULING** (ex-Shirasaki)  
Displacement : 950 tons  
Dimensions : 203 × 31½ × 10½ feet  
Guns : 1—3 inch, 1—40 mm., 8—25 mm. AA., 4 M.G.  
Machinery : 2 Diesels. B.H.P. : 600 = 15 kts.

Notes.—Ex-Japanese. Refrigerated cargo ship. Destroyer hull. Laid up, non-operational.

**WU I** (ex-No. 16)  
Displacement : 1,800 tons  
Dimensions : 315 (o.a.) × 33½ × 12 feet  
Guns : 2—5 inch AA., 25—25 mm. AA., 5—13 mm. AA., 42 D.C.  
Machinery : Turbine. S.H.P. : 9,500 = 22 kts.  
Boilers : 2

Note.—Ex-Japanese. Non-operational.

**Ex-No. 172**  
Displacement : 1,129 tons  
Dimensions : 264 (o.a.) × 30 × 10½ feet  
Guns : 1—3.1 inch (8 cm.), 21—25 mm. AA., 12 D.C.  
Machinery : Turbine. S.H.P. : 2,500 = 16 kts.  
Boilers : 2

Note.—Ex-Japanese.

**312 KUN LUN** (ex-Hai Chi, ex-Japanese Kaiki)  
Displacement : 1,612 tons standard  
Dimensions : 261 (o.a.) × 43½ × 12 feet  
Guns : 1—40 mm., 4—25 mm., 2—20 mm., 6 M.G.  
Machinery : Reciprocating. H.P. : 1,650 = 9 kts.  
Complement : 130

Notes.—Built 1919. Small coastal transport.

**314 NAN WHU** (ex-S.S. Tai Hu, ex-S.S. Steelmotor)  
Displacement : 1,695 tons standard  
Dimensions : 250 × 42½ × 16½ feet  
Machinery : Diesel. Speed 8.5 kts.  
Complement : 85

Notes.—Built in U.S.A. 1923. Cargo ship/transport. Captured by Chinese Nationalists and taken over by Navy.

**313 HUEI FENG** **315 CHIU HUA**

## Landing Ships.

### LST Type.



**CHUNG CHIEN.** 1947, Official.

<b>07 CHUNG CHENG</b> (ex-LST 1075)	<b>204 CHUNG HSING</b> (ex-LST 557)
<b>06 CHUNG CHI</b> (ex-LST 1017)	<b>208 CHUNG HSUN</b> (ex-LST 993)
<b>05 CHUNG CHIEN</b> (ex-LST 716)	<b>209 CHUNG LIEN</b> (ex-LST 1050)
<b>02 CHUNG CHUAN</b> (ex-LST 1030)	<b>203 CHUNG TING</b> (ex-LST 537)
<b>01 CHUNG HAI</b> (ex-LST 755)	<b>211 CHUNG SHENG</b> (ex-LST 1033)
<b>10 CHUNG YUNG</b> (ex-LST 574)	

Displacement : 1,625 tons (4,080 tons full load)  
 Dimensions : 316 (w.l.), 328 (o.a.) × 50 × 14 (max.) feet  
 Guns : 6—40 mm. AA., 12—20 mm. AA.  
 Machinery : Diesel. 2 shafts. B.H.P. : 1,700 = 11 kts.  
 Complement : 119

**WAN KUO** (ex-LST 732) **WAN LEE** (ex-LST 380)

### LSSL Type.

Notes.—Three ex-U.S. Navy LSSLs were transferred to Nationalist China at Yokosuka, Japan 19 Feb. 1954.

### LSM Type.



**MEI TSEN.** Added 1949.

<b>41 MEI CHEN</b> (ex-LSM 155)	<b>244 MEI PENG</b> (ex-LSM 431)
<b>45 MEI HENG</b> (ex-LSM 456)	<b>246 MEI HUNG</b> (ex-LSM 442)
<b>48 MEI HO</b> (ex-LSM 432)	<b>247 MEI SUNG</b> (ex-LSM 457)
<b>42 MEI LO</b> (ex-LSM 157)	<b>243 MEI YI</b> (ex-LSM 285)

Displacement : 743 tons  
 Dimensions : 196½ (w.l.), 203½ (o.a.) × 34½ × 7½ feet  
 Guns : 2—40 mm. AA., 4—20 mm. AA.  
 Machinery : Diesel. 2 shafts. B.H.P. : 2,800 = 12 kts.  
 Complement : 59

**U CHAN**  
 Displacement : 887 tons  
 Dimensions : 264 × 29½ × 10½ feet

Notes.—Former Japanese No. 101 class LST. 14 light tanks, 120 troops.

## Landing Craft.

### LSIL Type.



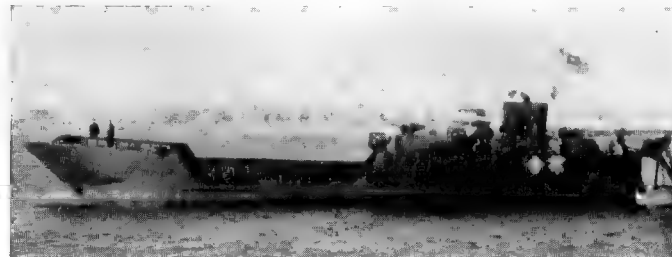
**LIENG KUANG.** 1947, Official.

<b>254 LIEN CHENG</b> (ex-LCI 630)	<b>252 LIEN LI</b> (ex-LCI 417)
<b>255 LIEN HUA</b> (ex-LCI 631)	<b>253 LIEN SHENG</b> (ex-LCI 418)
<b>251 LIEN CHU</b> (ex-LCI 233)	<b>LIEN YING</b>
	<b>256 LIEN CHIEH</b>

Displacement : 387 tons full load  
 Dimensions : 159 × 23½ × 5½ feet  
 Guns : 2—20 mm. AA.  
 Machinery : Diesel. 2 shafts. B.H.P. : 1,320 = 14 kts.  
 Complement : 28

Notes.—Ex-LCI (M) 630. Ex-LCI (G) 631, 233, 418, 417. Five Nationalist, 251-255.

### LCU (ex-LCT) Type.



**HO CHUN.** 1947, Official.

<b>405 HO CHANG</b> (ex-LCT 512)	<b>407 HO CHIH</b> (ex-LCT)
<b>403 HO CHENG</b> (ex-LCT 1143)	<b>401 HO CHUN</b> (ex-LCT 893)
<b>406 HO CHING</b> (ex-LCT 1145)	<b>404 HO CHUNG</b> (ex-LCT 849)
	<b>402 HO CH'UNG</b> (ex-LCT 1213)

Displacement : 285 tons full load  
 Dimensions : 114½ × 32½ × — feet  
 Guns : 2—20 mm. AA.  
 Machinery : Diesel. 3 shafts. B.H.P. : 675 = 10 kts.

Notes.—Additional landing craft were to have been transferred, including possibly 22 LCT 6 LCC, 25 LCM, 1 LCP 50 LCS and 25 LCVP.

## Repair Ship.

### 301 OMEI (ex-U.S.S. Maumee)

Builders : Mare Island Yard  
 Launched : 1915  
 Displacement : 4,990 tons (14,500 tons full load)  
 Dimensions : 475½ (o.a.) × 56 × 10 (mean), 26½ (max.) feet  
 Guns : 5—3 inch, 2—40 mm. AA., 8—20 mm. AA.  
 Machinery : Diesel. 2 shafts. B.H.P. : 5,000 = 14 kts.  
 Oil fuel : 820 tons

Notes.—Cargo capacity 7,850 tons. Repair ship and oiler.

## Oilers.

### 302 HSIN KAO (ex-Tai Hwa, ex-U.S.S. Towaliga, AOG 42)

Builders : East Coast Shipyards  
 Launched : Oct. 29, 1944  
 Displacement : 700 tons (2,700 tons full load) 1,453 tons deadweight.  
 Dimensions : 212½ (w.l.), 220½ (o.a.) × 37 × 12½ feet  
 Guns : 1—3 inch, 2—40 mm. AA., 3—20 mm. AA.  
 Machinery : Diesel. B.H.P. : 800 = 10 kts.

### 303 YUCHUAN (ex-Wautauga, AOG 22, ex-Conrol, ex-YOG 52, U.S.S. Sakaton Chee)

Builders : Todd-Galveston S.B. Co.  
 Launched : Jan. 10, 1944  
 Displacement : 700 tons (2,700 tons full load) 1,453 tons deadweight  
 Dimensions : 220½ (o.a.) × 37 × 12½ feet  
 Machinery : Diesel. 1 shaft. B.H.P. : 800 = 10 kts.

Notes.—Ex-U.S. TI-M-A2 type small oiler. Both above ships are ex-U.S. Mettawee class.

### 304 SZU MING (ex-U.S.S. Yo 198)

Displacement : 1,400 tons full load  
 Dimensions : 174 (o.a.) × 32 × 15  
 Guns : 1—25 mm., 2—20 mm., 2 M.G.  
 Machinery : Diesel. B.H.P. : 560 = 11 kts.

Note.—Built in U.S.A. 1945. Oil capacity 6,570 barrels.

## Fleet Tugs.

### 331 PU TO (ex-ATR 26)

Launched : April 23, 1944.  
 Displacement : 1,312 tons  
 Dimensions : 155 (w.l.), 165½ (o.a.) × 33½ × 15½ feet  
 Guns : 1—25 mm., 4 M.G.  
 Machinery : Triple expansion. I.H.P. : 1,600 = 12 kts.  
 Boiler : Babcock & Wilcox  
 Complement : 52

Notes.—Built of wood. It was hoped to acquire 4 more tugs of above type, 4 of ATA type, and 30 smaller ones.

### 332 WU KUNG (ex-Pei Chi No. 1, ex-LT) 334 TA HUNG (ex-LT 530) 333 TA MING (ex-LT 300) 336 TA CH'ING (ex-LT 355)

Displacement : 570 tons light, 967 tons full load  
 Dimensions : 149 (o.a.) × 33 × 15 feet  
 Guns : 1—40 mm., 2—20 mm.  
 Machinery : Reciprocating. Oil fuel. H.P. : 1,200 = 12 kts.  
 Complement : 20

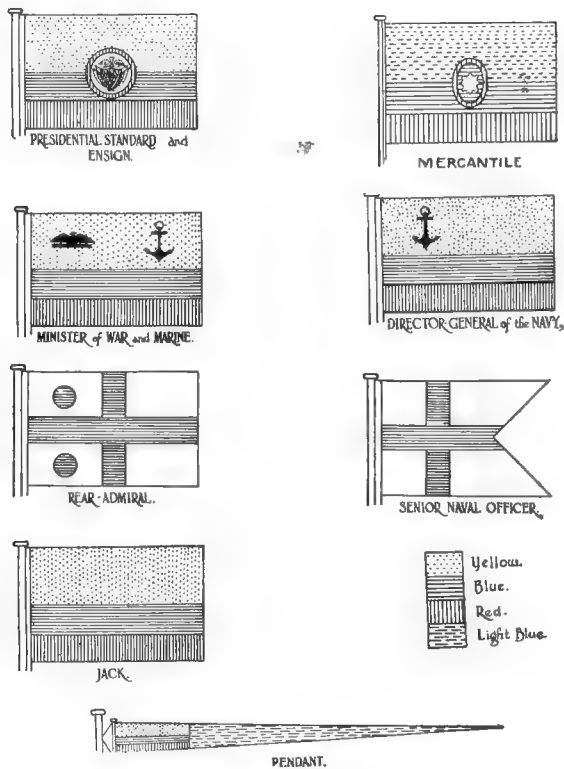
Notes.—Built in U.S.A. 1943. Ta Ch'ing reported decommissioned 1 June 1951.

### 335 TA YU (ex-LT 310)

Displacement : 760 tons  
 Dimensions : 143 (o.a.) × 33 × 14 feet  
 Guns : 2—25 mm., 2 M.G.  
 Machinery : Diesel-electric. H.P. : 1,500 = 12.5 kts.

Notes.—Former U.S. Army ATA/ATR 143 ft. class. Built U.S.A. 1944-45.

Flags.



Administration.

Director-General of Navy : Capitan de Navio Juan A. Pizarro Garcia.

Personnel.

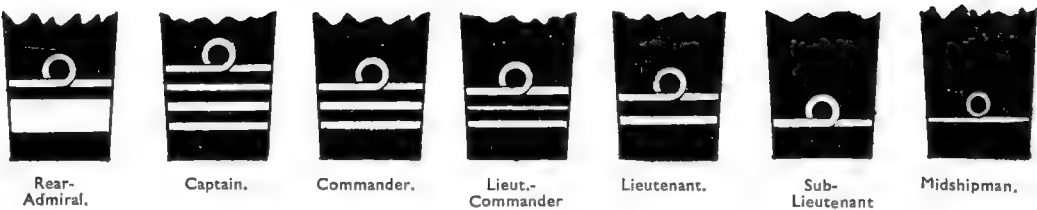
189 officers, 2,600 men. Also 800 Marines.

Ships.

Ships names are prefaced by "A.R.C." (Armada Republica Colombia).

COLOMBIA

Uniforms.



Other branches are distinguished by the following colours between stripes:—

Surgeons :	scarlet.	Instructor officers :	light blue.
Engineers :	purple.	Electrical officers :	dark green.
Dental Surgeons :	orange.	Radio officers :	light green.
Supply officers :	white.	Legal officers :	silver grey.

Naval Base.

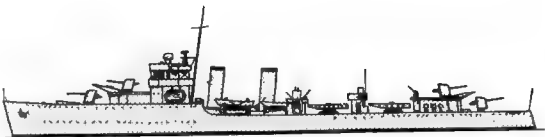
CARTAGENA, where entire construction of small naval craft is now undertaken in the naval dockyard.

Silhouettes.

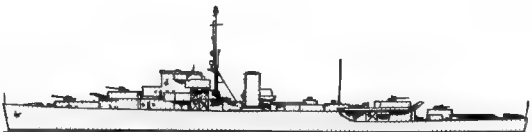
\* Scale: 150 feet = 1 inch



ANTIOQUIA\*



CALDAS



ALMIRANTE BRIÓN, ALMIRANTE PADILLA,  
CAPITAN TONO

Destroyers.



ANTIOQUIA

1954, Comandante R. Azuero Vargas.



CALDAS (before re-arming)

1947.

ANTIOQUIA (ex-Douro)

CALDAS (ex-Tejo)

Displacement : 1,219 tons standard (1,563 tons full load)  
Dimensions : 319 (pp.), 322 (o.a.) × 31 × 11 (max.) feet  
Guns : 2—5 inch, AA., 6—40 mm. AA., 6 D.C.T.  
Tubes : 4—21 inch, in quadruple mounts  
Machinery : Parsons geared turbines, 2 shafts, S.H.P. : 33,000 = 36 kts.  
Boilers : 3 Yarrow, working pressure 400 lb.  
Oil fuel : 296 tons  
Radius : 5,400 miles at 15 kts.  
Complement : 147

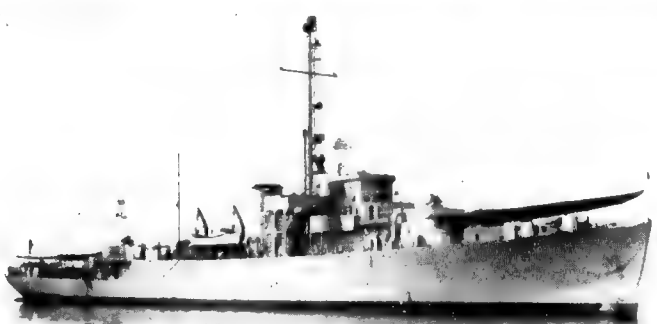
Notes.—Both Yarrow type built at Lisbon for Portugal, launched 9 June 1932 and 18 Nov. 1933, respectively and purchased in 1934. Fitted for minelaying. Antioquia was entirely modernised at Cartagena naval base in 1952. New armament installed in U.S.A. in 1953 included single 5-inch guns and twin Bofors. Caldas underwent similar refit and rearmament in 1954.

Frigates.



ALMIRANTE PADILLA.

1948, Official.



ALMIRANTE BRIÓN (ex-U.S.S. Burlington)  
ALMIRANTE PADILLA (ex-U.S.S. Groton)

CAPITAN TONO (ex-U.S.S. Bisbee)

Displacement : 1,430 tons (2,100 tons full load) Capitan Tono 2,200 tons  
Dimensions : 303½ × 37½ × 13½ feet  
Guns : 3—3 inch, 6—40 mm. AA., 4—20 mm. AA., 3 D.C.T.  
A/S Weapons : Hedgehog, D.C.  
Machinery : Triple expansion, 2 shafts, I.H.P. : 5,500 = 20 kts.  
Boilers : 2, of 3-drum type  
Fuel : 290 tons  
Complement : 120 (Capitan Tono 103)

Notes.—All completed 1944. Almirante Padilla purchased from U.S. Navy in 1947. Saw active service in Korean waters 1951. Capitan Tono which was transferred to Russia during Second World War acquired from U.S. 1952 and served 14 months in Korean waters Almirante Brión acquired in 1953.

Pendant No.	Name	Builders	Laid down	Launched	Completed
14	Almirante Brión	Consolidated Steel Corp., Los Angeles	19 Oct. 1943	7 Dec. 1943	3 Apr. 1944
06	Almirante Padilla	Walter Butler, Superior, Wisc.	15 July 1943	14 Sep. 1943	5 Sep. 1944
	Capitan Tono	Consolidated Steel Corp., Los Angeles	7 Aug. 1943	8 Sep. 1943	15 Feb. 1944



COLOMBIA—Motor Launches, Gunboats, Oilers, Tugs, etc.

Motor Launches.

ALBERTO RESTREPO (1 Oct. 1952)      HUMBERTO CORTES (26 Nov. 1952)  
CARLOS GALINDO (1954)      JUAN LUCIO (2 May 1953)

Displacement : 35 tons  
Dimensions : 76½ (pp.), 81½ (o.a.) × 12 × 2½ feet  
Guns : 1—20 mm., 4 M.G.  
Machinery : 2 G.M. Diesels, B.H.P. : 260 = 13 kts.  
Complement : 13

ALFONSO VARGAS (3 July 1952)      FRITZ HAGALE (19 July 1952)

Displacement : 33 tons  
Dimensions : 72 (pp.), 76 (o.a.) × 12 × 2½ feet

Note.—Other particulars similar to above.



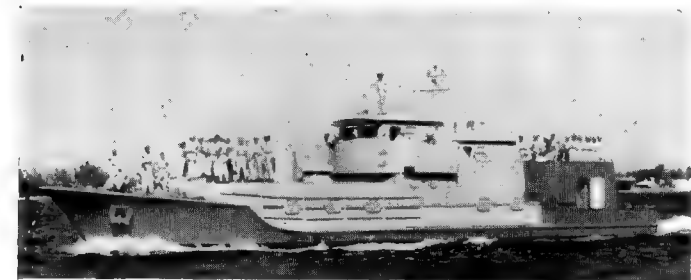
1953, Official.

ESPARTANA (22 June 1950)

Displacement : 50 tons  
Dimensions : 90 (w.l.), 96 (o.a.) × 13 × 4½ feet  
Guns : 1—20 mm. AA.  
Machinery : 2 Diesels, B.H.P. : 300 = 13.5 kts.  
Oil fuel : 6 tons  
Complement : 11

Notes.—A new design constructed by the Engineer of the Naval Dockyard at Cartagena.

Transports.



ALBERTO GOMEZ.

1954, Comandante R. Azeuro Vargas.

ALBERTO GOMEZ (1954)      MARIO SERPO (1953)  
HERNANDO GUTIERREZ (1953)

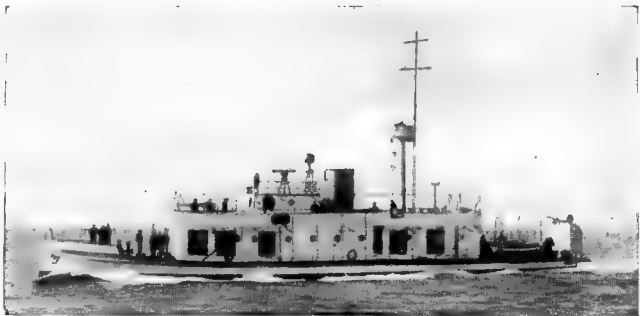
Displacement : 70 tons  
Dimensions : 82 × 18 × — feet  
Machinery : 2 G.M. diesels, B.H.P. : 130 = 9 kts.

CIUDAD DE PEREIRA

Displacement : 633 tons  
Dimensions : 163 × 33 × 10 feet  
Machinery : 2 Diesels, B.H.P. : 600 = 10 kts.  
Complement : 20

Notes.—Light naval transport. Former U.S. Army freight ship FS-139. Transport Cucuta has been scrapped.

River Gunboats.



CARTAGENA.

Photo courtesy Messrs. Yarrow & Co., Ltd., Glasgow.

BARRANQUILLA

Displacement : 142 tons  
Dimensions : 130 (pp.), 137½ (o.a.) × 23½ × 2½ (max.) feet  
Guns : 2—3 inch, 1—20 mm. AA., 4 M.G.  
Machinery : 2 Gardner semi-Diesel engines, 2 shafts, working in tunnels, H.P. : 600 = 15.5 kts.  
Fuel : 24 tons  
Complement : 39

CARTAGENA

SANTA MARTA

Notes.—These three vessels represent an extraordinarily efficient type of shallow draught gunboat, incorporating many improvements on previous types. Hull is of galvanised steel, and machinery spaces, cabins and magazines are of bullet-proof plating. Ventilation and refrigerating plant designed to secure excellent habitability. Names are those of Colombian ports.

Name	Builders	Launched
Barranquilla	Yarrow & Co., Ltd., Scotstoun, Glasgow.	10 May, 1930
Cartagena		26 Mar., 1930
Santa Marta		16 Apr., 1930

PRESIDENTE MOSQUERA

Launched : 1912  
Displacement : 230 tons  
Dimensions : 127½ × 26½ × 4½ feet  
Guns : 1—3 inch, 2—20 mm. AA., 7 M.G.  
Machinery : Triple expansion (stern wheel)  
Speed : 11 kts.  
Complement : 60

Notes.—Refitted in 1952 and now operational. Gunboat Mariscal Sucre has been scrapped.

Coastguard Vessels.

R. D. BINNEY (1947)

Displacement : 25 tons  
Dimensions : 63 × 11 × 3½ feet  
Machinery : Diesels, B.H.P. : 115 = 10 kts.

Note.—Coastguard vessels Carabobo, Junin and Pichincha have been scrapped.

Motor Minesweeper

LETICIA

Oilers.

SANCHO JIMENO (purchased 1952)

Displacement : 6,000 tons  
Dimensions : 325 × 48 × 19 feet  
Machinery : 1 Enterprise engine, B.H.P. : 1,400 = 11 kts.  
Complement : 35

BLAS DE LEZO (ex-U.S.S. Kalamazoo, AOG 30)

Builders : East Coast S.Y.  
Launched : 30 Aug., 1944  
Displacement : 700 tons (Cargo capacity : 1,228 tons)  
Dimensions : 212½ (w.l.), 220½ (o.a.) × 37 × 12½ feet  
Machinery : Diesel, B.H.P. : 800 = 9.5 kts  
Oil fuel : 60 tons  
Complement : 67

CABIMAS (Pendant No. 61)

Builders : Palmers, Hebburn-on-Tyne  
Launched : 1924  
Displacement : 2,900 tons  
Dimensions : 290 (o.a.) × 47 × 14½ feet  
Machinery : Triple expansion, I.H.P. : 1,025 = 10 kts.  
Fuel : 142 tons (re-boilered 1951)  
Complement : 123

Hospital Ship.

JAMARY

Dimensions : 146 × 25½ × 8 feet  
Complement : 43

Note.—Beds for 80 patients.

Tugs.

CAPITÁN BOCANEGRA  
CAPITÁN JULIO PATIÑO

Displacement : 50 tons  
Dimensions : 63 × 14 × 2½ feet  
Machinery : 2 G.M. Diesels, B.H.P. : 260

CAPITÁN RIGOBERTO GIRALDO  
CAPITÁN RUIZ

CORONEL MORA ANGUEYRA

Launched : 1945  
Displacement : 20 tons  
Machinery : Diesel, B.H.P. : 84 = 10 kts.

ANDAGOYA

Launched : 1928  
Displacement : 100 tons  
Machinery : Bolinder Diesel, B.H.P. : 300 = 17

ABDIA MENDEZ

Displacement : 39 tons  
Dimensions : 52½ × 11 × 4 feet  
Machinery : Caterpillar Diesel, B.H.P. : 80 = 8 k

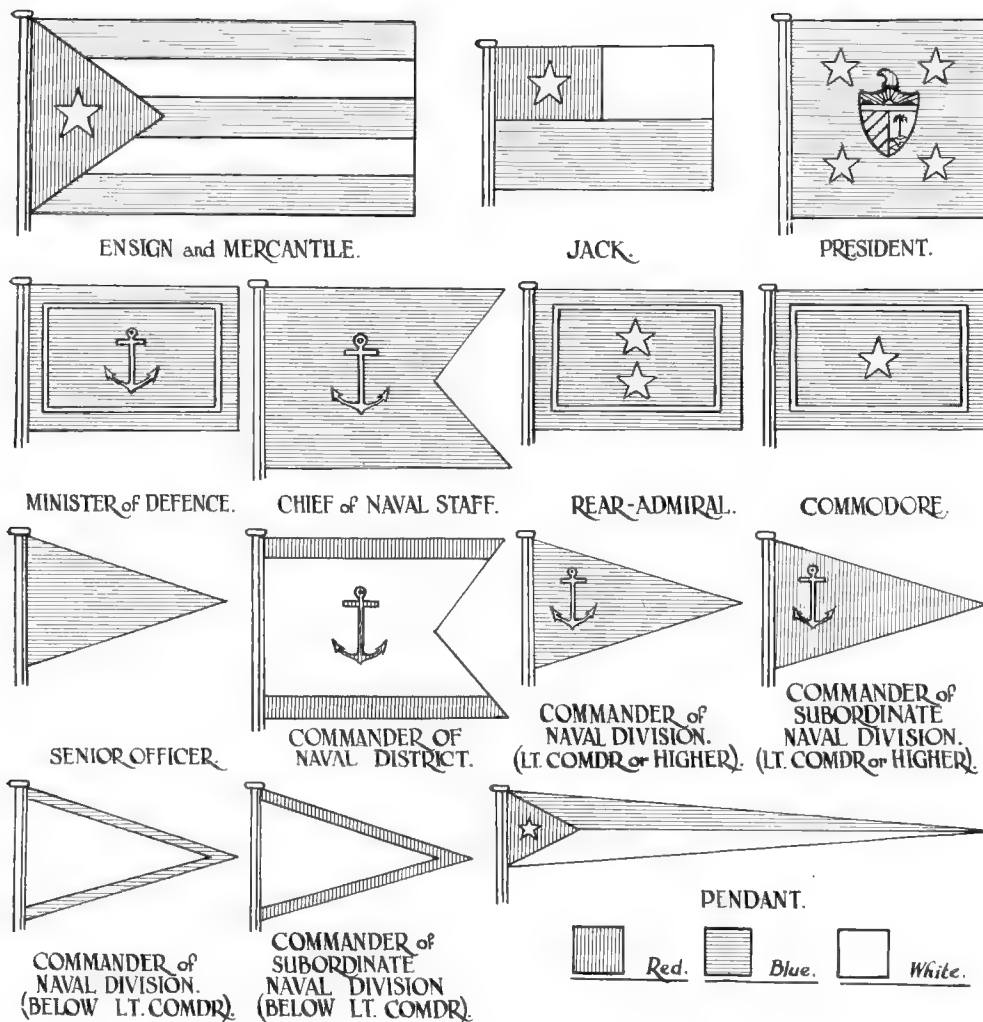
Note.—Built in Germany, 1924. Tugs Delamar and Bogota have been scrapped.

Training Ship.

LA ATREVIDA (Ketch)

## CUBA

## Flags.



## Administration.

Chief of Naval Staff : Contralmirante José E. Rodríguez Calderón, M.N.M.

## Uniforms.



Contralmirante Comodoro Capitán de Navio Capitán de Fragata Capitán de Corbeta Teniente de Navio Alférez de Navio Alférez de Fragata Aspirante Sub-oficial

Rear-Admiral Commodore Captain Commander Lieut.-Cmdr. Lieutenant (Senior) Lieutenant (Junior) Sub-Lieutenant Midshipman or Cadet Branch Officer

Note.—Blue shoulder-pieces having stripes in similar arrangement worn on white uniform and overcoat. Aspirantes, 1—4 stripes according to years of training. Rear-Admiral (Contralmirante) is temporary rank (Grado Transitorio).

## Naval Establishments and Dockyards.

**Naval Dockyard :** In Arsenal de Casa Blanca. Marine Railway. 2,000 tons. Actually not in service. A dry dock is projected.

**Private Dockyard :** In Havana. Compania de Fomento. Marine Railway. 2,000 tons. In service.

A Government dockyard is projected in Havana Bay, near Tiscornia.

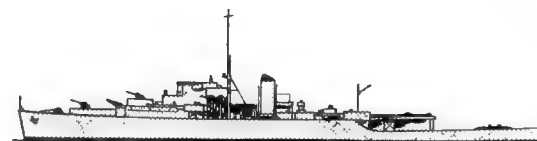
**Naval Academy at Mariel.** First Class Naval Institution. Training Ship B.E. *Patria*, former sloop.

**Naval School at Morro Castle, Havana.** Centro de Entrenamiento Naval para Alistados (CENA) for training of enlisted personnel.

## Personnel.

468 officers, 5,200 men

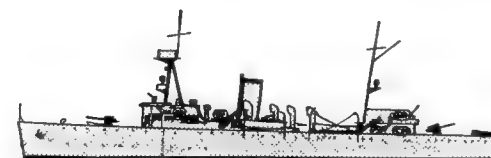
## Silhouettes.



JOSÉ MARTÍ Class.



CARIBE, SIBONEY.



CUBA.



PATRIA.

CUBA—Frigates, Patrol Vessels

Frigates (Fragatas).

3 Ex-U.S. Type.



MÁXIMO GÓMEZ

1954, Official



ANTONIO MACEO.

1951, Official.

ANTONIO MACEO (ex-Grand Island)

JOSÉ MARTÍ (ex-Eugene)

MÁXIMO GÓMEZ (ex-Peoria)

Displacement : 1,400 tons (2,350 tons full load)  
Dimensions : 285 (w.l.), 304 (o.a.) × 37½ × 13½ feet  
Guns : 3—3 inch d.p., 2—40 mm. AA., (except Máximo Gómez, 3—3 inch d.p., 8—20 mm. AA.)  
Machinery : Triple expansion, 2 shafts. I.H.P. : 5,500 = 20 kts.  
Boilers : 2, of 3-drum type  
Complement : 135 (José Martí)

Notes.—Acquired from U.S.N. in 1947. José Martí is fitted as flagship.

Pendant Nos.	Name	Builders	Laid down	Launched	Completed
PE 302	Antonio Maceo	Kaiser Richmond, Cal.	27 Nov. 1943	19 Feb. 1944	27 May 1944
PE 301	José Martí	Consolidated Steel, San Pedro	12 June 1943	6 July 1943	15 Jan. 1944
PE 303	Máximo Gómez	Leatham Smith, Superior	4 June 1943	2 Oct. 1943	15 Oct. 1944

Frigate (Rated as Crucero).



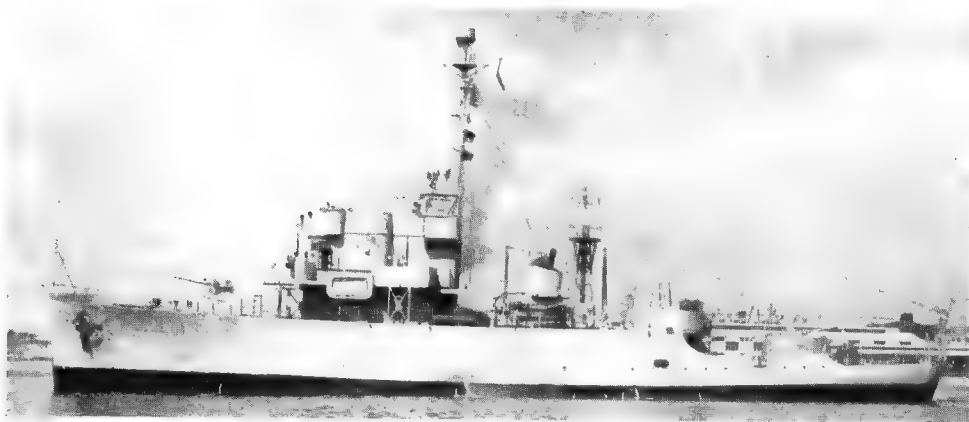
1952, Official.

CUBA

Builders : Cramp, Philadelphia  
Launched : 10 Aug., 1911  
Displacement : 2,055 tons  
Dimensions : 260 (pp.) × 39 × 14 feet  
Guns : 2—4 inch, 2—3 inch, 1—3 inch, 23 cal., 4—6 pdr., 3 M.G., 2 D.C.T.  
Machinery : Triple expansion. I.H.P. : 2,050 = 18 kts.  
Boilers : 2 Foster Wheeler 3-drum type.

Notes.—Reconstructed 1936-37. Converted from coal to oil burning.

Escort Patrol Vessels (Buques de Patrulla y Escolta).



CARIBE.

1954, Official.

CARIBE (ex-PCE 872)

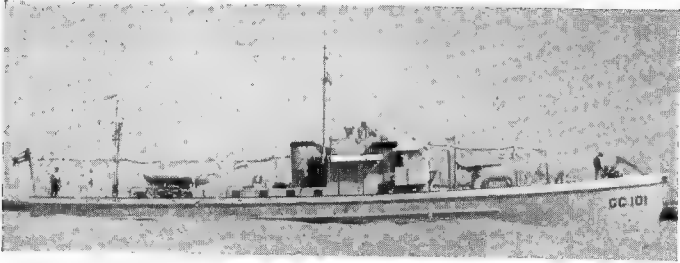
SIBONEY (ex-PCE 893)

Displacement : 640 tons standard, (900 tons full load)  
Dimensions : 180 (w.l.), 184½ (o.a.) × 33 × 9½ feet  
Guns : 1—3 inch d.p., 3—40 mm. AA., 4—20 mm. AA.  
Machinery : 12 cylinder Marine Diesel. 2 shafts. B.H.P. : 1,800 = 16 kts.  
Complement : 99

Notes.—Built in U.S.A. Launched March 24 and May 8, 1943, respectively. Box deck-house amidships removed from Caribe 1953.

Coast Guard Patrol Vessels.

(Guardacostas).



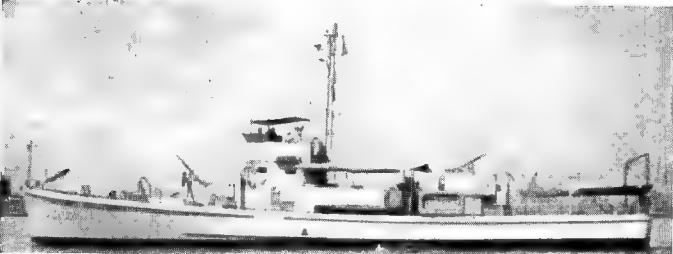
LEONCIO PRADO. 1952, Official.

LEONCIO PRADO GC 101

Built : Havana  
Launched : 1946

Displacement : 80 tons  
Dimensions : 110 × 14½ × 6½ feet  
Guns : 1—20 mm. AA.  
Machinery : 2 sets 8-cycle, 2-stroke Diesels. B.H.P. : 1,000 = 15 kts.  
Oil : 2,232 gallons for a cruising radius of 16,000 miles

Note.—Wooden hulled.



HABANA. 1954, Official.

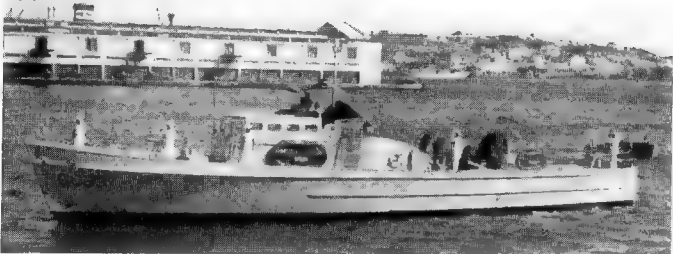
CAMAGUEY GC 105 (ex-SC 1001)      ORIENTE GC 104 (ex-SC 1000)  
HABANA GC 107 (ex-SC 1291)      PINAR DEL RIO GC 108 (ex-SC)  
LAS VILLAS GC 106 (ex-SC 1290)

Displacement : 95 tons  
Dimensions : 107½ (w.l.), 111 (o.a.) × 17 × 6½ feet  
Guns : 2—20 mm. AA.  
Machinery : G.M. Diesels. 2 shafts. B.H.P. : 1,000 = 15 kts.

Notes.—Built in U.S.A. Wooden hulled. Launched 1942-43

Coast Guard Cutters.

(Guardacostas, 83 ft).

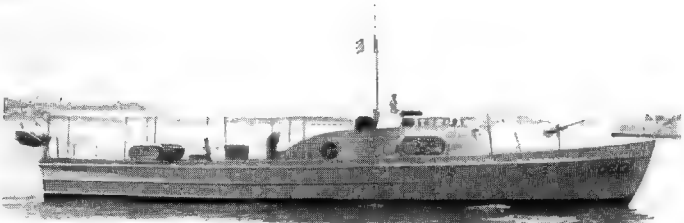


GC 33. 1949, Official.

GC 32      GC 33      GC 34

Displacement : 45 tons  
Dimensions : 83 × 16 × 4½ feet  
Guns : 1—1 pdr.  
Machinery : 2 Superior Diesel motors B.H.P. : 460 = 12 kts.  
Complement : 12

Notes.—Built in U.S.A. Launched 1942-43. Ex-United States Coast Guard Cutters 56191, 56190, 56198. Wood.



GC 13. 1951, Official.

GC 11      GC 12      GC 13      GC 14      GC 22

Displacement : 45 tons  
Dimensions : 83 × 16 × 4½ feet  
Guns : 1—1 pdr. Depth charges  
Machinery : 2 Sterling Viking petrol motors. H.P. : 1,200 = 18 kts.  
Complement : 12

Notes.—Former CS of same numbers. Built in U.S.A. Launched 1942-43. Ex-United States Coast Guard Cutters 83351, 83386, 83385, 83395, 83316, respectively. Wood. Received from U.S. Navy in March, 1943.

Training Ship (Buque-Escuela).

PATRIA

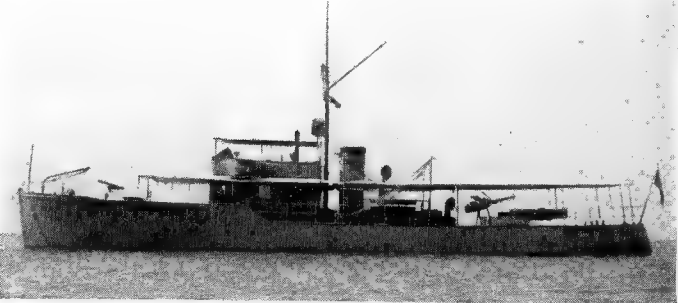
Builders : Cramp, Philadelphia  
Launched : 10 Aug. 1911

Displacement : 1,200 tons  
Dimensions : 200 (pp.) × 36 × 13 feet  
Guns : 2—3 inch (Bethlehem), 4—57 mm., 4—47 mm., 2—3 pdr.  
Machinery : Triple expansion I.H.P. : 4,000 = 16 kts.  
Boilers : Babcock (oil fuel)

Notes.—Ex-sloop. Reconstructed 1936-37. Former coal-burner of 150 tons capacity. Converted to oil fuel. The B.E. Patria is actually at Mariel as a permanent installation of the Naval Academy for the training of midshipmen. Has been removed from the effective list. For appearance see silhouette on page 167.

Auxiliary Coast Guard Cutters.

(Guardacostas Auxiliares).



DONATIVO. 1948, Official.

DONATIVO GC 102 (ex-Capitan Fernandez Quevedo)

Built : Havana  
Launched : 1932

Displacement : 130 tons  
Dimensions : 101 × 18 × 7 feet  
Machinery : 2 sets Diesels. B.H.P. : 360 = 12 kts.



MATANZAS. 1948, Official.

MATANZAS GC 103

Built : Havana  
Launched : 1912

Displacement : 80 tons  
Dimensions : 100 × 18 × 6 feet  
Guns : 1—1 pdr.  
Machinery : 2 Fairbanks Morse Diesels. B.H.P. : 180 = 12 kts.

Note.—Wooden hulled.

Auxiliary Patrol Craft

SV 1      SV 2      SV 3      SV 4

Displacement : 6-15 tons  
Dimensions : 32 × 10 × 2½ feet  
Machinery : 2 Chrysler Crown. B.H.P. : 230 = 18 kts.

Notes.—Auxiliary patrol boats for port vigilance, launched in 1953.

## CUBA—Service and Auxiliary Vessels

### Surveying Vessel.

(Buque de Servicio Hidrográfico).



1952, Official.

**YARA** (ex-Ruperto Rodriguez)

Built :	Middlesbrough
Launched :	1895
Displacement :	449 tons
Dimensions :	155 × 26 × 13 feet
Machinery :	Triple expansion. I.H.P. : 600 = 12 kts.
Oil fuel :	145 tons

Notes.—Originally coal-fired. Employed in Hydrographic service.

### Presidential Yacht.

(Yate Presidencial).



1951, Official.

**10 DE MARZO** (ex-Wakitty)

Launched :	1929
Displacement :	57.7 tons
Dimensions :	74 × 15 × 5 feet
Guns :	1 M.G.
Machinery :	2 Grey Marine Diesel engines. B.H.P. : 450

Note.—Built in U.S.A. Name changed to 10 de Marzo in 1954.

### Motor Launches (Ex-Torpedo Boats).

(Buque-Auxiliar, Ex-Torpederos).



R 42

1949, Official.

**R 41** (ex-PT 715)

Displacement :	35 tons
Dimensions :	71 × 19½ × 5 feet
Guns :	2 M.G.
Machinery :	3 Packard petrol engines. 3 shafts. B.H.P. : 3,600 = 40 kts. (max.)

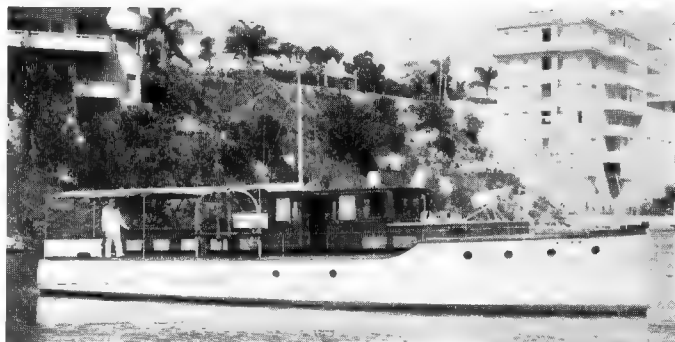
**R 42** (ex-PT 716)

**R 43** (ex-U.S. PT)

Notes.—Built in U.S.A. Launched 1944. Sunk during hurricane, Oct. 5, 1948, but were subsequently salvaged and are in service, as air-sea rescue craft.

### Auxiliary Vessels.

(Buque-Auxiliar).



1949, Official.

A 1

A 2

A 4

Notes.—Formerly yachts. Similar type to 10 de Marzo in preceding column.

### Lighthouse Tenders.

(Buques de Servicio de Faros).

**A 10**

Launched :	1944
Displacement :	98 tons
Dimensions :	104 × 19 × 11 feet
Machinery :	2 Grey Marine Diesels. B.H.P. : 450 = 10 kts.



1953, Official.

**ENRIQUE COLLAZO** (ex-Joaquin Godoy)

Built :	Paisley, Scotland
Launched :	1906

Displacement :	815 tons
Dimensions :	211 × 34 × 9 feet
Machinery :	Triple expansion. 2 shafts I.H.P. : 672 = 8 kts.

Note.—Acquired in 1950 from Cuban mercantile marine.

### Rescue and Salvage Tugs.

(Buques de Rescate y Salvamento).



20 DE MAYO.

1954, Official.

**10 DE OCTUBRE** (ex-ATR 4)

**20 DE MAYO** (ex-ATR 3)

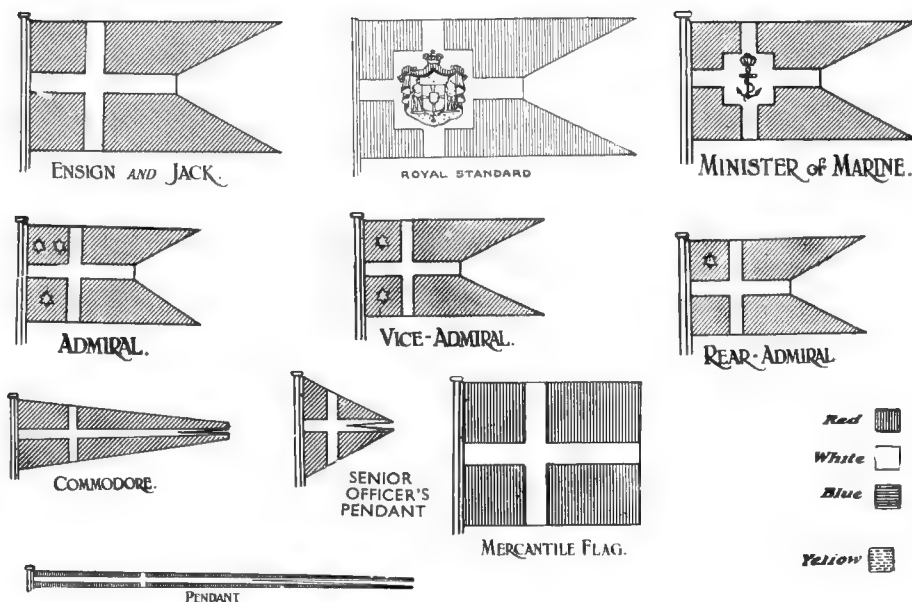
Displacement :	852 tons
Dimensions :	155 (w.l.), 165½ (o.a.) × 33½ × 16 feet
Guns :	1—3 inch d.p., 2—20 mm. in 20 De Mayo (none in 10 de Octubre)
Machinery :	Triple expansion. I.H.P. : 1,600 = 12 kts.
Boilers :	2 Babcock & Wilcox D type. Oil burning

Notes.—Built in U.S.A. Launched 1943. Wood. RS 201 and RS 202, respectively. 10 de Octubre is unarmed.



# DENMARK

## Flags.



Ground colour of all flags is red. Diagonal shading in 8 of these should therefore be assumed as vertical.

## Personnel.

About 6,000, all ranks.

## Navy Estimates.

1950-51 : Kr. 88,800,000. 1951-52 : Kr. 95,500,000. 1952-53 : Kr. 120,000,000. 1953-54 : Kr. 151,000,000

## Ships.

Danish warships are referred to officially with the prefix H.D.M.S. All have black waterline

## Mercantile Marine.

Lloyd's Register appendix, 1954 : 701 vessels of 1,529,169 tons gross.

## Uniforms.



Admiral.	Vice-Admiral.	Kontre-Admiral.	Kommandör.	Kommandör kaptajn.	Orlogs-kaptajn.	Kaptajn-löjtnant.	Sölöjtnant 1' Grad.	Sölöjtnant 2' Grad.
Admiral.	Vice-Admiral.	Rear-Admiral	Commodore.	Captain.	Commander.	Lieutenant-Commander.	Lieutenant.	Sub-Lieutenant.

## Administration

Minister of Defence : Mr. Rasmüs Hansen.

Commander-in-Chief : Vice-Admiral A. H. Vedel, K.C.B., R.D.N.

Naval Attaché, London : Commodore J. T. B. Münter. R.D.N.

## Silhouettes

Scale : 150 ft. = 1 inch.



HOLGER DANSKE



HUITFELDT, WILLEMOES.



NIELS EBBESEN.



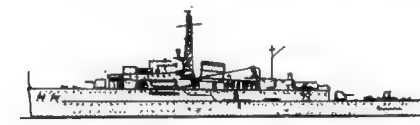
THETIS.



GALATHEA



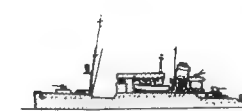
ROLF KRAKE



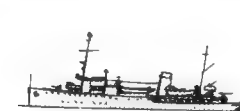
ÆGIR



ESBERN SNARE.



LINDORMEN.



HEJMDAL.

DENMARK—Frigates, Corvettes

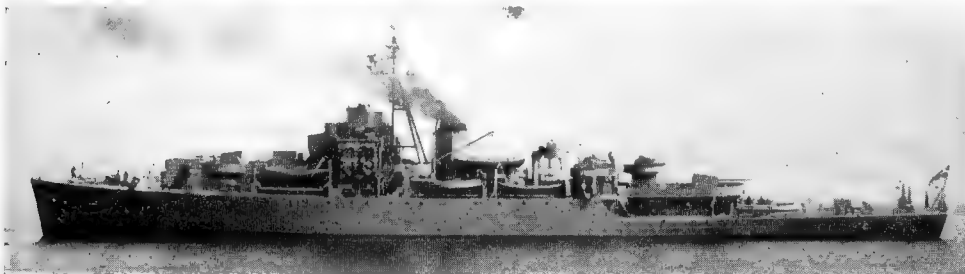
Frigates.

2 Ex-British "River" Class



HOLGER DANSKE

1954, courtesy H. A. Breton, Esq.



NIELS EBBESEN

1951, courtesy Captain R. Steen Steensen, R.D.N.

**HOLGER DANSKE** (ex-H.M.S. Monnow)

**NIELS EBBESEN** (ex-H.M.S. Annan)

Displacement : 1,398 tons (2,134 tons full load)  
Dimensions : 301½ × 36½ × 12 feet  
Guns : 2—5.1 inch, 2—57 mm. (saluting), 4—40 mm. AA., 2—20 mm. AA. Madsen  
Tubes : 2—17.7 inch  
Machinery : Triple expansion. 2 shafts. I.H.P. : 5,500 = 20 kts.  
Boilers : 2, of 3-drum type  
Complement : 140

Notes.—Of the original frigates of the "River" Class. Purchased from Great Britain. Employed as sea-going Training Ships for midshipmen and for boys, respectively.

Pendant No.	Name	Builders	Laid down	Launched	Completed
F 338	Halger Danske	Charles Hill & Sons, Ltd.	28 Jun., 1943	4 Dec., 1943	11 May, 1944
F 339	Niels Ebbesen	Hall, Russell & Co., Ltd.	10 Jun., 1943	29 Dec., 1943	29 Jun., 1944

Corvettes.

4 New Construction

**BELLONA**

**DIANA**

**FLORA**

**TRITON**

Displacement : 800 tons  
Dimensions : 180 × — × — feet  
Machinery : Diesel

Notes.—Two steel-hulled escort patrol vessels, PCE 1608 and PCE 1609, ordered 11 Dec. 1951, named *Bellona* and *Diana*, were built in the United States under the Mutual Defense Assistance Programme and delivered in Spring 1954. Two PCEs, named *Flora* and *Triton* are being built in Italy for completion in 1954-55. Officially classified as corvettes in 1954.

Pendant No.	Name	Builders	Laid down	Completed
F 344	Bellona	Avondale Marine Ways, Inc.,	1 Dec. 1952	End 1953
F 345	Diana	Westwego, Louisiana.	10 Dec. 1952	End 1953
F 346	Flora			
F 347	Triton			

Frigates—continued.

3 Ex-British "Hunt" Class.



ESBERN SNARE

1954, courtesy Captain R. Steen Steensen, R.D.N.

**ESBERN SNARE** (ex-H.M.S. Blackmore) **ROLF KRAKE** (ex-H.M.S. Calpe) **VALDEMAR SEJR** (ex-H.M.S. Exmoor)

Displacement : 1,050 tons standard (1,610 tons full load)  
Dimensions : 280 (o.a.) × 31½ × 14 (max.) feet  
Guns : 6—4 inch AA., 4—40 mm. AA.  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 19,000 = 25 kts.  
Boilers : 2 of 3-drum type  
Oil fuel : 280 tons

Notes.—British "Hunt" class, type II. Lent by Great Britain in 1953 for 4 years. Reconstruction 1953-54.

Pendant No.	Name	Builders	Laid down	Launched	Completed
F 341	Esbern Snare	Alex. Stephen & Sons, Ltd., Glasgow.	10 Feb. 1941	2 Dec. 1941	14 Apr. 1942
F 342	Rolf Krake	Swan, Hunter & Wigham Richardson, Ltd., Wallsend.	12 June 1940	28 Apr. 1941	11 Dec. 1941
F 343	Valdemar Sejr	Swan, Hunter & Wigham Richardson, Ltd., Wallsend.	7 June 1940	12 Mar. 1941	18 Oct. 1941

1 Ex-British "Flower" Class



1952, courtesy Captain R. Steen Steensen, R.D.N.

**THETIS** (ex-H.M.S. Geranium)

Builders : Wm. Simons & Co., Ltd.  
Laid down : 21 Sep., 1939  
Launched : 23 Apr., 1940  
Completed : 24 Jun., 1940  
Displacement : 1,000 tons (1,313 tons full load)  
Dimensions : 190 (bp.), 205 (o.a.) × 33 × 14½ feet (max.)  
Guns : 1—4 inch AA., 1—40 mm. AA., 4—20 mm. AA. Madsen  
Machinery : Triple expansion. I.H.P. : 2,750 = 16 kts.  
Boilers : 2 S.E.  
Oil fuel : 230 tons  
Complement : 85

Notes.—Purchased from Great Britain. Operates in North Sea and off Faroes. Rebuilt and modernised, 1951-52. New boilers installed and funnel stepped a little more aft. Pendant No. F 340.

## Submarines.

## 3 New Construction

## DELFINEN

## SPÆKHUGGEREN

## TUMLEREN

Notes.—These new submarines of approximately 600 tons displacement are being built in the Royal Dockyard, Copenhagen.

## 3 Ex-British "U" Class.



STØREN.

1951, courtesy Captain R. Steen Steensen, R.D.N.



SÆLEN

1947, courtesy Captain R. Steen Steensen, R.D.N.

## SÆLEN (ex-Morse, ex-H.M.S. Vortex)

## STØREN (ex-H.M.S. Vulpine)

Displacement :	545 tons standard, 662 tons surface, 740 tons submerged
Dimensions :	206 × 16 × 14½ feet
Tubes :	4—21 inch (or 6 mines)
Machinery :	2 Davey Paxman Diesels, 2 electric motors. B.H.P. : 800/760 = 13/9 kts.
Fuel :	56 tons
Complement :	36



SPRINGEREN as rebuilt with snort and without gun.

1954, courtesy Captain R. Steen Steenson, R.D.N.

## SPRINGEREN (ex-Dzik, ex-P 52)

Displacement :	540 tons standard, 644 tons surface, 732 tons submerged
Dimensions :	200 × 16 × 14½ feet
Tubes :	4—21 inch
Machinery :	2 Davey Paxman Diesels, 2 electric motors. B.H.P. : 615/825 = 11/9 kts.
Fuel :	40 tons
Complement :	36

Notes.—All three boats chartered from Great Britain. Formerly known as U3, U2, U1, but now named after fish and sea animals. All rebuilt and modernised with snort installed and no gun.

Name	Builders	Laid down	Launched	Completed
Sælen	Vickers-Armstrongs (Barrow)	13 Aug. 1943	19 Aug. 1944	1 Dec. 1944
Støren	Vickers-Armstrongs (Tyne)	18 Nov. 1942	28 Dec. 1943	2 June 1944
Springeren	Vickers-Armstrongs (Barrow)	30 Dec. 1941	11 Oct. 1942	16 Dec. 1942

Coastal Destroyers (*Kystjagere*).

## 2 "Huitfeldt" Class.



HUITFELDT.

1952, courtesy Captain R. Steen Steensen, R.D.N.

## HUITFELDT (ex-Nymfen)

## WILLEMOES (ex-Najaden)

Displacement	782 tons standard (890 tons full load)
Dimensions :	283 (o.a.), 279 (pp.) × 27½ × 11½ feet
Guns :	2—4.1 inch, 3—40 mm. AA., 6—20 mm. Madsen
Tubes :	6—21 inch, 2 D.C.T.
Mines :	60
Machinery :	Geared turbines. 2 shafts. S.H.P. : 21,000 = 35 kts.
Oil fuel :	100 tons
Complement :	92

Notes.—Formerly known as Torpedo Boats. Reclassified as Coastal Destroyers in 1951. Named after Danish naval officers.

Pendant Nos.	Name	Builders	Laid down	Launched	Completed
D 320	Huitfeldt	Royal Dockyard,	1939	22 June, 1943	1947
D 321	Willemoes	Copenhagen	1939	17 Mar., 1943	1947

## Patrol Vessels

## 6 "Bille" Class



KRABBE.

1954, courtesy Captain R. Steen Steenson, R.D.N.

## BILLE

## BUHL

## HAMMER

## HOLM

## KRABBE

## KRIEGER

Displacement :	329 tons (382 tons full load)
Dimensions :	210 × 21 × 7½ feet
Guns :	3—40 mm., AA.
A/S weapons :	2 D.C.T.
Machinery :	Danish Atlas geared turbines. 2 shafts. S.H.P. : 6,900 = 29 kts.

Notes.—Formerly known as Torpedo Boats. Reclassified as Patrol Vessels in 1952, and refitted for escort and A/S work with lattice mast. Torpedo tubes replaced by U.S. anti-aircraft weapons. Krabbe as partly reconstructed will later have tubes removed and an electronic cabin to replace them. Until finally rebuilt some boats still have 6—18 inch torpedo tubes. All built at Royal Dockyard, Copenhagen. Named after naval officers.

Pendant No.	Name	Launched	Pendant No.	Name	Launched
P 570	Bille	21 Sep., 1946	P 573	Holm	5 Feb., 1948
P 571	Buhl	10 Sep., 1947	P 574	Krabb	27 Jun., 1946
P 572	Hammer	23 Jun., 1948	P 575	Krie	4 May, 1946

DENMARK—Minelayers, Exploration and Surveying Vessels

Minelayers (Minelæggere).

BESKYTTEREN VINDHUNDEN  
Notes.—Former United States LSMs being reconstructed as minelayers in U.S.A.



1952, courtesy Captain R. Steen Steensen, R.D.N.

LINDORMEN

Builders : Royal Dockyard, Copenhagen  
Launched : 30 Mar., 1940  
Displacement : 604 tons (645 tons full load)  
Dimensions : 175½ (o.a.), 167½ (pp.) × 29 × 8 feet  
Guns : 1—3 inch, 3—40 mm. AA., 2 MG.  
Mines : 150  
Machinery : Triple expansion, 2 shafts. I.H.P. : 1,200 = 14 kts.  
Boilers : 2 Thornycroft 3-drum type  
Oil fuel : 35 tons  
Complement : 66

Note.—Scuttled in Copenhagen Harbour, August 29, 1943, but was salvaged and refitted with a new rig. Pendant No. N 39.

Deep-sea Exploration Vessel.



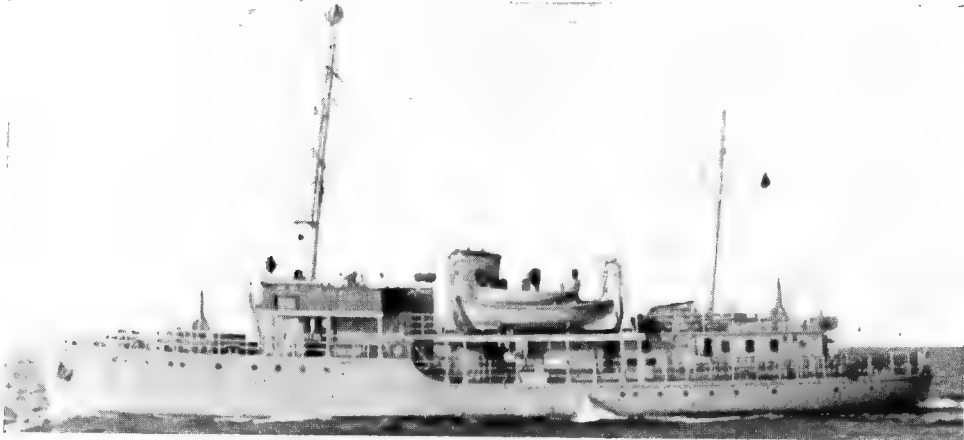
Added 1952, R. M. Scott.

GALATHEA (ex-Friendship, ex-merchant ship Byron, ex-sloop H.M.S. Leith)

Launched : 9 Sep., 1933  
Displacement : 990 tons (1,500 tons full load)  
Dimensions : 250 (pp.), 265½ (o.a.) × 35½ × 7½ (mean), 10 (max.) eet  
Guns : 3—57 mm.  
Speed : 16 kts.

Notes.—Pendant No. A546. Is likely to be discarded in the near future.

Surveying Vessels (Opmaalingsskibe).



1951, courtesy Captain R. Steen Steensen, R.D.N.

FREJA

Builders : Royal Dockyard, Copenhagen  
Launched : 22 Dec., 1938  
Displacement : 322 tons  
Dimensions : 124½ (pp.) 134 (o.a.) × 25½ × 7½ feet  
Guns : 2—20 mm. AA. (Not mounted when on Surveying Service)  
Machinery : Triple expansion. 1 shaft. I.H.P. : 300 = 10.5 kts.  
Boilers : 1 cylindrical  
Oil fuel : 15 tons  
Complement : 40

Note.—Pendant No. A 541.



1952, courtesy Captain R. Steen Steensen, R.D.N.

HEJMDAL

Builders : Royal Dockyard, Copenhagen  
Launched : 1 Feb., 1935  
Completed : Apr., 1935  
Displacement : 705 tons  
Dimensions : 175 (o.a.) × 30 × 12 feet  
Guns : 1—3 inch, 2—20 mm.  
Machinery : Triple expansion. 1 shaft. I.H.P. : 800 = 12.5 kts.  
Boilers : 2 cylindrical  
Oil fuel : 100 tons  
Radius : 4,000 miles at 12 kts.  
Complement : 40

Notes.—Classed as a Surveying Vessel, but also employed on Fishery Protection duties. Mainmast, removed during the war, re-stepped. Pendant No. A 542.

## Motor Torpedo Boats.

### New Construction

**FLYVEFISKEN** P 569 **HAYKATTEN** P 571 **MAKRELEN** P 573  
**HÅJEN** P 570 **LAXEN** P 572 **SVÆRDFISKEN** P 574

Notes.—These six new MTBs are being built to bring the total up to 24. Three being built in Royal Dockland, Copenhagen, three in Frederikssundvaerft. Details nearly as ex-German MTBs. All units named after fishes.

### 12 "Glenten" Class



SKADEN.

1952, courtesy, Captain R. Steen Steensen, R.D.N.

**GLENTEN**-P 551 (ex-T 51, ex-S 316) **JAGTFALKEN**-P 557 (ex-T 57, ex-S 305)  
**GRIIBEN**-P 552 (ex-T 52, ex-S 107) **MUSVAAGEN**-P 558 (ex-T 58, ex-S 79)  
**HAVØRNEN**-P 553 (ex-T 53, ex-S 216) **RAAGEN**-P 559 (ex-T 59, ex-S 197)  
**HÆRFUGLEN**-P 554 (ex-T 54, ex-S 133) **RAVNEN**-P 560 (ex-T 60, ex-S 97)  
**HØGEN**-P 555 (ex-T 55, ex-S 266) **SKADEN**-P 561 (ex-T 61, ex-S 207)  
**ISFUGLEN**-P 556 (ex-T 56, ex-S 127) **VIBEN**-P 568 (ex-S 68)

Displacement : 99 tons  
Dimensions : 115 × 17½ × 6 feet  
Guns : 1—40 mm., 3—20 mm. AA.  
Tubes : 2—21 inch  
Machinery : 3 Mercedes-Benz Diesels. B.H.P. : 6,000 = 36 kts.  
Complement : 22

Notes.—Ex-German Schnell-boote. Now named after birds.

### 6 "Falken" Class.

**FALKEN** P 562 (ex-Blink, ex-S 302) **STORMFUGLEN** P 565 (ex-Lyn, ex-S 64)  
**HEJREN** P 563 (ex-Tross, ex-S 117) **TARNFALKEN** P 566 (ex-Brønn, ex-S 303)  
**LOMMEN** P 564 (ex-Kjekk, ex-S 195) **TRANEN** P 567 (ex-Storm, ex-S 85)

Displacement : 100 tons  
Dimensions : 115 (p.p.), 121½ (o.a.) × 17 × 6 feet  
Guns : 1—40 mm., 3—20 mm.  
Tubes : 2—21 inch  
Machinery : 3 Diesels. B.H.P. : 7,500 = 38 kts.

Notes.—Ex-German. All launched 1939-44. Transferred from Royal Norwegian Navy in 1951.

## Auxiliary Motor Minesweepers

### 6 U.S. AMS Type.

**AARØSUND** M 571 **EGERNSUND** M 573 **GULDBØRSUND** M 575  
**ALLSUND** M 572 **GRØNSUND** M 574 **OMØSUND** M 576

Displacement : 375 tons  
Dimensions : 138 (p.p.), 144 (o.a.) × 27 feet

Notes.—AMS 60 class NATO auxiliary motor minesweepers AMS 127-130 and two more building in U.S.A. Complete 1954-55.

## Coastal Minesweepers.



SÖLÖVEN.

1953, courtesy Captain R. Steen Steensen, R.D.N.



SÖRIDEREN.

1946, courtesy Captain R. Steen Steensen, R.D.N.

SÖHESTEN	SÖHUNDEN	SÖLÖVEN	SÖRIDEREN
Displacement :	274 tons (315 tons full load)		
Dimensions :	169 (pp.), 176½ (o.a.) × 20½ × 6½ feet		
Guns :	2—40 mm. AA., 4—20 mm. AA., Bofors. 2 D.C.T.		
Machinery :	Geared turbine, 1 shaft. S.H.P. : 2,200 = 19 kts.		
Boiler :	1 Thornycroft 3-drum type		
Oil fuel :	30 tons		
Complement :	48		

Notes.—All built at Royal Dockyard, Copenhagen. Equipped for minelaying. Sölöven means Sealion; Söhunden, Seadog; Söridderen, Sea Knight; Söhesten, Seahorse.

Pendant No.	Name	Launched
M 541	Söhesten	30 Apr. 1942
M 542	Söhunden	16 May 1942
M 543	Sölöven	3 Dec. 1938
M 544	Söridderen	11 Apr. 1942

## Motor Minesweepers.

**AALHOLM** Y 369 (ex-MSK 1)

Displacement : 69 tons  
Dimensions : 65½ × 16½ × 7½ feet  
Guns : 1—20 mm. A.A.  
Machinery : Diesel. B.H.P. : 120 = 10 kts.

Notes.—Built by Frederikssundvaerft. All launched 1945.

**FYRHOLM** Y 372 (ex-MSK 4)

Displacement : 70 tons  
Dimensions : 69 × 17 × 9 feet  
Guns : 1—20 mm. AA.  
Machinery : Diesel. B.H.P. : 120 = 10 kts.

Notes.—Built by Sydhavnsvaerft. All launched 1944-45.

**BIRKHOLM** Y 370 (ex-MSK 2)  
**ERTHOLM** Y 371 (ex-MSK 3)

**GRÆSHOLM** Y 373 (ex-MSK 5)  
**LINDHOLM** Y 374 (ex-MSK 6)

## Motor Torpedo Boats, Coastal Minesweepers—DENMARK

### Motor Minesweepers—continued.



VORN/ES.

1953, courtesy Captain R. Steen Steensen, R.D.N.

**STIGSNÆS** M 554 (ex-MR 230)

Displacement : 150 tons  
Dimensions : 129½ × 18½ × 5½ feet  
Guns : 2—20 mm. AA. Madsen.  
Machinery : Diesel. B.H.P. : 2,800 = 23 kts.  
Fuel : 14 tons  
Complement : 21

**TRELLENÆS** M 555 (ex-MR 236)  
**VORNÆS** M 556 (ex-MR 242)

Notes.—Ex-German craft. Wood. All launched 1943-44. MR 229 scrapped 1951.



ASN/ES (note stern).

1954, courtesy Captain R. Steen Steensen, R.D.N.

**ASNÆS** M 547 (ex-MR 154)  
**BOGNÆS** M 548 (ex-MR 155)  
**DYRNÆS** M 549 (ex-MR 156)  
**EGENÆS** M 550 (ex-MR 157)

Displacement : 124 tons  
Guns : 1 or 2—20 mm. AA.  
Machinery : Diesel. B.H.P. : 1,800 = 20 kts.  
Oil fuel : 10 tons  
Complement : 19

Notes.—Ex-German craft. Wood. All launched 1938-43. MR 152, 173, 214 scrapped 1951

**GRAADYB** M 568 (ex-ML 1)

Displacement : 21 tons  
Dimensions : 50 × 13½ × 3½ feet

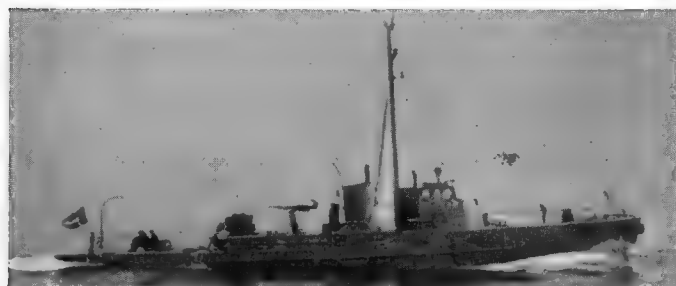
Notes.—All launched 1944. Officially classed as shallow water minesweepers.

**KLØRDYB** M 569 (ex-ML 2)  
**VEJDYB** M 570 (ex-ML 3)



## DENMARK—Mining Tenders, Depot Ships, etc.

### Motor Minesweepers—continued.



STRYNØ. 1953, Captain R. Steen Steensen, R.D.N.

**SORTE SARA** M 559 (ex-MS 1) **ENØ** M 562 (ex-MS 5) **LYØ** M 565 (ex-MS 8)  
**ASKØ** M 560 (ex-MS 2) **FENØ** M 563 (ex MS 6) **MANØ** M 566 (ex-MS 9)  
**BAAGØ** M 561 (ex-MS 3) **HJORTØ** M 564 (ex-MS 7) **STRYNØ** M 567 (ex-MS 10)

Displacement : 74 tons  
 Dimensions :  $78\frac{1}{2} \times 21 \times 5$  feet  
 Guns : 1—20 mm., 2 M.G.  
 Machinery : Diesel. 1 shaft. B.H.P. : 350 = 11 kts.

Notes.—Wood. All launched 1941. MS 4 was scuttled in Aug. 1943.

### Mining Tenders (Minelæggere).



1951, Capt. R. Steen Steenson.

#### LANGELAND

Builders : Royal Dockyard, Copenhagen  
 Launched : 17 May, 1950  
 Displacement : 309.5 tons standard, 323 tons full load  
 Dimensions :  $133\frac{1}{2}$  (o.a.),  $128\frac{1}{2}$  (pp.)  $\times$   $23\frac{3}{4} \times 7\frac{1}{2}$  feet  
 Guns : 2—40 mm., 2—20 mm. Madsen  
 Machinery : Diesel. 2 shafts. B.H.P. : 385 = 11.6 kts.  
 Complement : 37

Note.—Pendant No. N 42.

#### LAALAND

Displacement : 240 tons  
 Dimensions :  $105\frac{1}{2} \times 21\frac{1}{2} \times 6\frac{1}{2}$  feet  
 Guns : 2—20 m.m. AA.  
 Machinery : B. & W. Diesel. 1 shaft. B.H.P. : 350 = 10 kts.  
 Complement : 31

Notes.—Built by Copenhagen Naval Yard. Both launched 1941. Pendant Nos. N 40 and N 41, respectively.

#### LOUGEN



1954, courtesy Captain R. Steen Steensen, R.D.N.

#### HJÆLPEREN (ex-U.S. LSM 500)

Displacement : 743 tons (1,095 tons full load)  
 Dimensions :  $203\frac{1}{2}$  (o.a.)  $\times$   $34\frac{1}{2} \times 8\frac{1}{2}$  feet  
 Guns : 4—40 mm.  
 Machinery : Diesels. 2 shafts. B.H.P. : 2,800 = 12 kts.  
 Complement : 60

Notes.—Ex-United States medium landing ship. Transferred 15 May 1953. Depot and repair ship for MTBs.



1952, courtesy Captain R. Steen Steensen, R.D.N.

#### ÆGIR (ex-Tanga)

Builders : Neptun Werft, Rostock  
 Launched : 1938  
 Displacement : 2,620 tons  
 Dimensions : 299 (311 o.a.)  $\times$   $44\frac{1}{2} \times 13\frac{1}{2}$  feet  
 Guns : 2—5.1 inch, 6—40 mm. AA  
 Machinery : 2 M.A.N. Diesels. B.H.P. : 4,100 = 17.5 kts.

Notes.—Ex-German depot ship. Purchased and renamed. Refitted, rearmed and modernised. As rebuilt has a new lattice mast, and new anti-aircraft armament. Reconstruction completed in June 1951. Pendant No. A 560.

### Tenders.

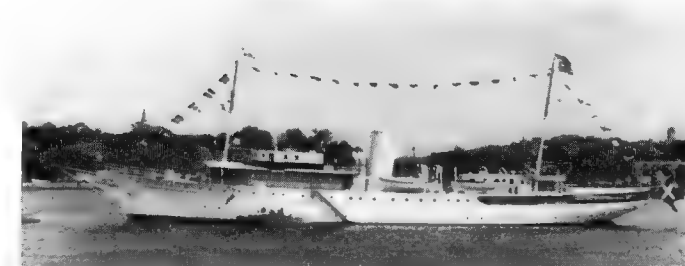
#### HOLLÆNDERDYBET (ex-Den Lille Havfrue)

Displacement : 158 tons full load (88 tons gross)  
 Dimensions :  $150 \times 19 \times 7\frac{1}{2}$  feet  
 Machinery : Diesel

Notes.—Both launched 1935. Manned by Coast Artillery personnel. Used for transport purposes.

#### KONGEDYBET (ex-Kirsten Pii)

### Royal Yacht (Kongeskib).



Added 1950, courtesy Lieutenant A. Sugden, R.N.

#### DANNEBROG

Builders : Royal Dockyard, Copenhagen  
 Launched : 1931  
 Displacement : 1,130 tons  
 Dimensions :  $246$  (o.a.)  $\times$   $34 \times 11\frac{1}{2}$  feet  
 Guns : 2—37 mm.  
 Machinery : 2 sets Burmeister & Wain 8-cylinder, 2-cycle Diesels  
 B.H.P. : 1,800 = 14 kts.  
 Complement : 57

### Fishery Patrol Craft (Fiskeriinspektionsfartøjer).

#### SKARVEN

Displacement : 130 tons  
 Dimensions :  $82 \times 20\frac{1}{2} \times 9\frac{1}{2}$  feet  
 Guns : 1—37 mm.  
 Machinery : Alfa Diesel. B.H.P. : 180  
 Complement : 9

Notes.—Of wooden construction. Built by Lillevaerft, Korsør, and Holbaek Skibbygger respectively. Launched 1951. For service in Greenland waters.

#### TEJSTEN

#### MAAGEN

Builders : Frederikssund  
 Launched : 1930  
 Displacement : 90 tons  
 Dimensions :  $71\frac{1}{2}$  (o.a.)  $\times$   $16\frac{1}{2} \times 9\frac{1}{2}$  feet  
 Guns : 1—37 mm.  
 Machinery : 1 Tuxham motor. B.H.P. : 108 = 8 kts.  
 Complement : 11

Notes.—Of wooden construction. For service in Greenland waters. Alken wrecked off coast of Greenland in a gale, 1949.

### Surveying Tender (Opmaalingsfartøj).

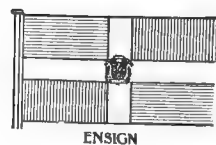
#### TERNEN

Built : Faaborg  
 Launched : 1937  
 Displacement : 82 tons  
 Dimensions :  $68\frac{1}{2}$  (o.a.)  $\times$   $16\frac{1}{2} \times 9\frac{1}{2}$  feet  
 Guns : 3—37 mm.  
 Machinery : 1 Möller & Jochumsen Diesel engine. B.H.P. : 110 = 8 kts.  
 Complement : 11

Notes.—Wood. Employed on fishery research and coastal surveying duties, Greenland.

# DOMINICAN REPUBLIC

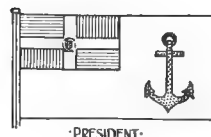
## Flags.



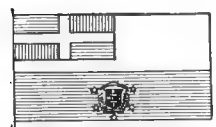
ENSIGN



JACK



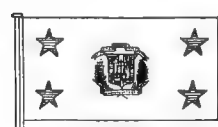
PRESIDENT



COMMANDER-IN-CHIEF



SECRETARY OF THE NAVY



UNDER SECRETARY OF THE NAVY



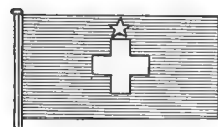
ADMIRAL



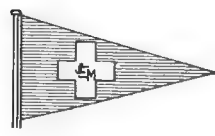
VICE-ADMIRAL



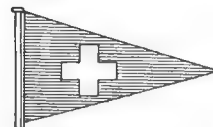
REAR-ADMIRAL



COMMODORE



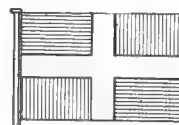
CHIEF OF THE NAVAL STAFF



SENIOR OFFICER OF NAVAL BASE OR ESTABLISHMENT



PENDANT



MERCANTILE

## Administration.

President and Supreme Chief of Naval Forces : General Hector Bienvenido Trujillo Molina.  
 Commander-in-Chief of Naval Forces : Generalissimo Dr. Rafael Leonidas Trujillo Molina.  
 Secretary of State for War, Marine and Aviation : Lieutenant-General Fausto E. Caamaño.  
 Chief of Naval Staff : Rear Admiral César de Windt Lavandier.

## Uniforms



ALMIRANTE. VICE-ALMIRANTE. CONTRA-ALMIRANTE. COMODORO. CAPITAN DE NAVIO. CAPITAN DE FRAGATA. CAPITAN DE CORBETA. TENIENTE DE NAVIO. ALFEREZ DE NAVIO. ALFEREZ DE FRAGATA

British Equivalent :

Admiral. Vice-Admiral. Rear-Admiral. Commodore. Captain. Commander. Lieut.-Commander. Lieutenant. Lieutenant (junior). Sub-Lieutenant.

Note.—Midshipman (Guardia Marina) wears anchor on sleeve.

## Dry Docks.

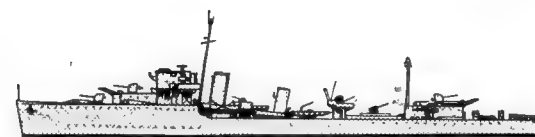
Naval Base of Las Calderas, 200 feet long, 48½ feet internal width, 65½ feet overall width, draught 4 feet. Capacity 1,000 tons.

Port of San Pedro de Macoris, 384 feet long, 46½ internal width, 77 feet overall width. Capacity 3,000 tons

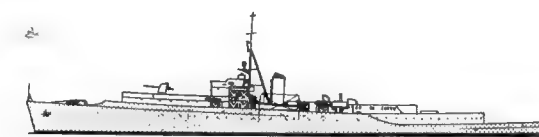
## Naval Personnel.

3,000 officers and men.

## Silhouettes.



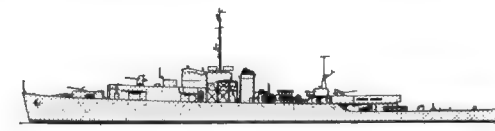
TRUJILLO.



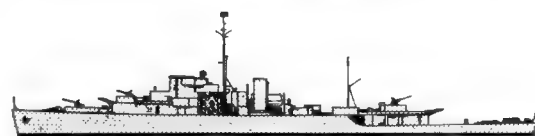
RESIDENTE TRUJILLO.



GENERALISIMO



JUAN PABLO DUARTE.



PRESIDENTE PEYNADO, PRESIDENTE TRONCOSO.



COLON Class (differ in detail)

DOMINICAN REPUBLIC—Destroyers and Frigates

Destroyers (*Destructores*).



TRUJILLO.

1954, Skyfotos.



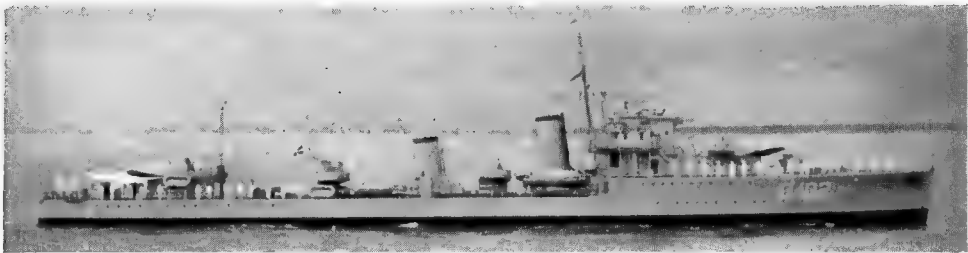
1951, Official.

TRUJILLO (*ex-Hotspur*)

Displacement : 1,340 tons (2,020 tons full load)  
Dimensions : 312 (pp.), 320 (w.l.), 323 (o.a.) × 33 × 8½ feet (mean)  
Guns : 3—4.7 inch, 6—20 mm. AA.  
Tubes : 4—21 inch,  
A.S. weapons : 4 D.C.T.  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 34,000 = 36 kts. (31 kts. sea speed)  
Boilers : 3 Admiralty 3-drum type  
Oil fuel : 455 tons  
Complement : 145

Notes.—Purchased from Great Britain, Nov. 1948. Radius of action : 5,700 miles. at 15 knots.

Destroyers—continued.



1953, Official.

GENERALÍSIMO (*ex-Fame*)

Displacement : 1,350 tons (2,060 tons full load)  
Dimensions : 318½ (pp.), 326 (w.l.), 329 (o.a.) × 33½ × 8½ feet (mean)  
Guns : 3—4.7 inch, 6—20 mm. AA.  
Tubes : 4—21 inch, 4 D.C.T.  
Machinery : Parsons geared turbines (by Parsons Co.). S.H.P. : 36,000 = 36 kts.  
Boilers : 3 Admiralty 3-drum type  
Oil fuel : 480 tons

Notes.—Transferred from British Navy, Feb. 1949. Radius of action : 6,000 miles at 15 knots.

Pendant No.	Name	Builders	Laid down	Launched	Completed
D 101	Trujillo	Scotts' S.B. & Eng. Co., Ltd., Greenock	27 Feb. 1935	23 Mar. 1936	29 Dec. 1936
D 102	Generalísimo	Vickers-Armstrong, Ltd., Barrow	5 July 1933	28 June 1934	26 Apr. 1935

Frigates (*Fragatas*).



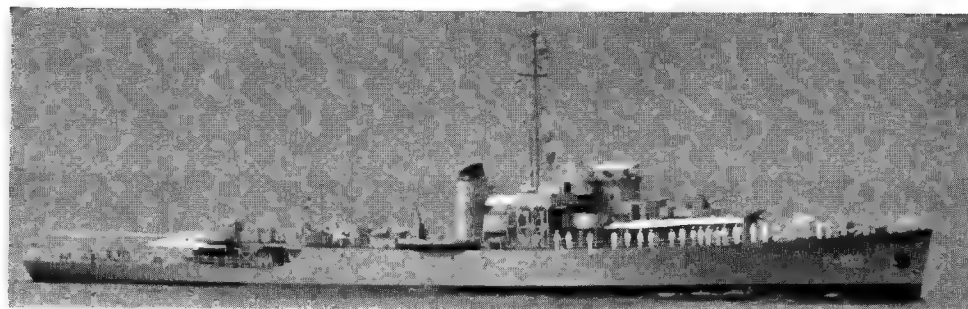
1950, Official.

PRESIDENTE TRUJILLO (*ex-H.M.C.S. Carlplace*)

Builders : Davie S.B. and Repairing Co., Lauzon.  
Launched : 6 July, 1944.  
Completed : 13 Dec. 1944  
Displacement : 1,400 tons (2,125 tons full load)  
Dimensions : 301½ × 36½ × 12 (mean) feet  
Guns : 1—4 inch, 2—47 mm., 1—40 mm. AA., and few small  
Machinery : Triple expansion. 2 shafts. I.H.P. : 5,500 = 20 kts.  
Boilers : 2, of 3-drum type  
Fuel : 645 tons

Notes.—Modified for use as Presidential Yacht with extra accommodation and deck-houses built up aft. Pendant No. F 101.

## Frigates—continued.



PRESIDENTE TRONCOSO

1953, Official

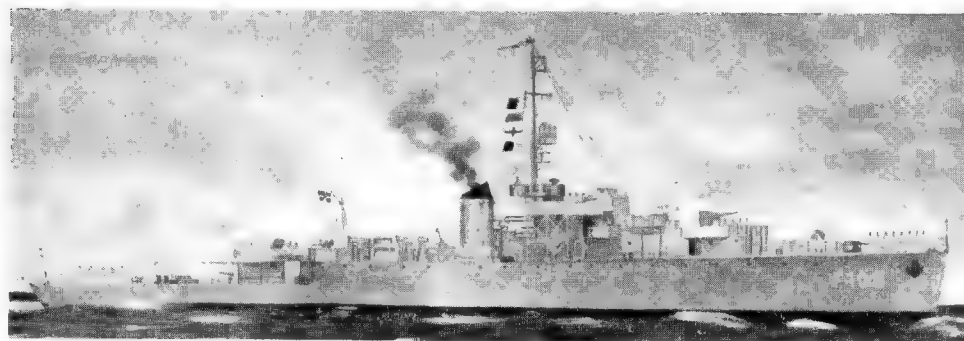
**PRESIDENTE PEYNADO** (ex-U.S.S. Knoxville)

Displacement : 1,430 tons (2,415 tons full load)  
Dimensions : 304 (o.a.) × 37½ × 12 (mean), 13½ (max.) feet  
Guns : 1—4 inch, 2—3 inch, 2—40 mm. A.A.  
Machinery : Triple expansion, 2 shafts. I.H.P. : 5,500 = 19 kts. (Trial speed 20.3 kts.)

Note.—Former United States "Tacoma" class frigates.

**PRESIDENTE TRONCOSO** (ex-U.S.S. Pueblo)

Pendant No.	Name	Builders	Laid down	Launched	Completed
F 104	Presidente Peynado	Leatham D. Smith S.B. Co.	15 Apr. 1943	10 July 1943	29 Apr. 1944
F 103	Presidente Troncoso	Kaiser S.Y. Richmond, Cal.	14 Nov. 1943	20 Jan. 1944	27 May 1944



JUAN PABLO DUARTE.

1953, Official.

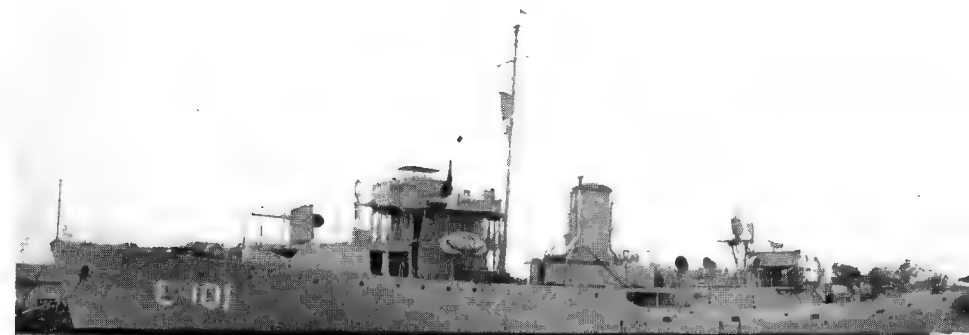
**JUAN PABLO DUARTE** (ex-U.S.S. Natchez, ex-H.M.S. Annan)

Builders : Canadian Vickers  
Laid down : 16 Mar. 1942  
Launched : 12 Sept. 1942  
Completed : 16 Dec. 1942

Displacement : 1,370 tons (2,360 tons full load)  
Dimensions : 283 (w.l.), 301½ (o.a.) × 36½ × 11½ (mean), 13½ (max.) feet  
Guns : 1—4 inch, 2—3 inch, 2—40 mm. A.A.  
Machinery : Triple expansion, 2 shafts. I.H.P. : 5,500 = 20 kts  
Complement : 90

Notes.—Pendant No. F 102. Former United States "Asheville" class frigate.

## Frigates (Rated as Corbetas).



COLON.

1951, Official.



JUAN BAUTISTA MAGGIOLO.

1951, Official.

**CRISTOBAL COLON** (ex-H.M.C.S. Lachute, June 9 1944)  
**GERARDO JANSEN** (ex-Peterborough, Jan. 15, 1944)

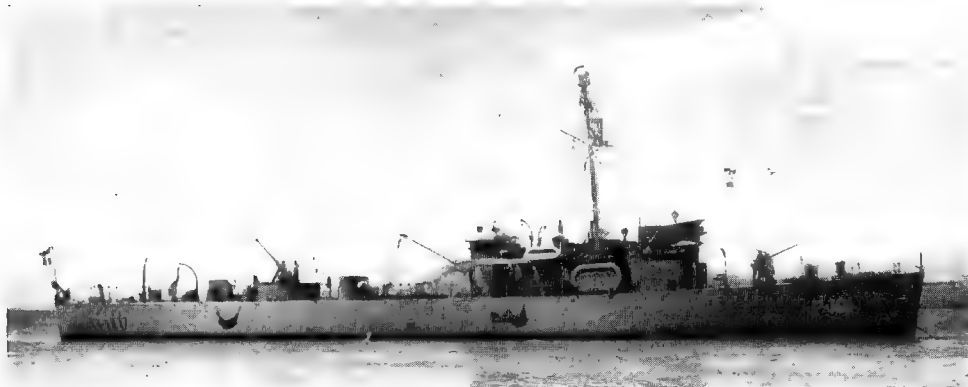
**JUAN ALEJANDRO ACOSTA** (ex-Louisbourg, July 13, 1943)  
**JUAN BAUTISTA CAMBIASO** (ex-Belleville, June 17, 1944)  
**JUAN BAUTISTA MAGGIOLO** (ex-Rivière du Loup, July 2, 1943)

Displacement : 1,060 tons (1,350 full load)  
Dimensions : 193 (pp.), 208 (o.a.) × 33 × 13½ (mean) feet  
Guns : 1—4 inch AA., (Colon, 1—3 inch), 1—40 mm., 2—20 mm. AA., 2 M.G.  
Machinery : Triple expansion, I.H.P. : 2,750 = 16 kts.  
Boilers : 2, of 3-drum type  
Oil fuel : 282 tons  
Complement : 53

Notes.—Launch dates above. Completed 26 Oct. 1944, 1 June 1944, 13 Dec. 1943, 19 Oct. 1944 and 21 Nov. 1943, respectively. Built by Kingston Shipbuilding Co., Kingston, Ont. (Jansen and Cambiaso) and Morton Ltd., Quebec City, P.Q. (other three). Pendant Nos. C 101, 104, 102, 103, 105, respectively. Asbestos wrecked en route from Canada.

DOMINICAN REPUBLIC—Patrol Vessels, Landing Craft

Patrol Vessels (*Patrulleros*).



27 DE FEBRERO.

1951, Official.

27 DE FEBRERO (ex-PC 613, Oct. 27., 1942)  
CAPITAN WENCESLAO ARVELO (ex-PC 1202, Feb. 27, 1943)

CIBAO (ex-Engage, ex-PC 1597, July 11, 1942)

Displacement 280 tons (450 tons full load)  
Dimensions : 170 (w.l.), 173½ × 23 × 7½ feet  
Guns : 1—3 inch, 50 cal., 1—40 mm. AA., 1—20 mm. AA.  
Machinery : Diesels. 2 shafts. B.H.P. : 3,750 = 22 kts.  
Complement 50

Notes.—Launch dates above. Pendant Nos. P 101, P 102, P 103, respectively.



RESTAURACION.

1951, Official.

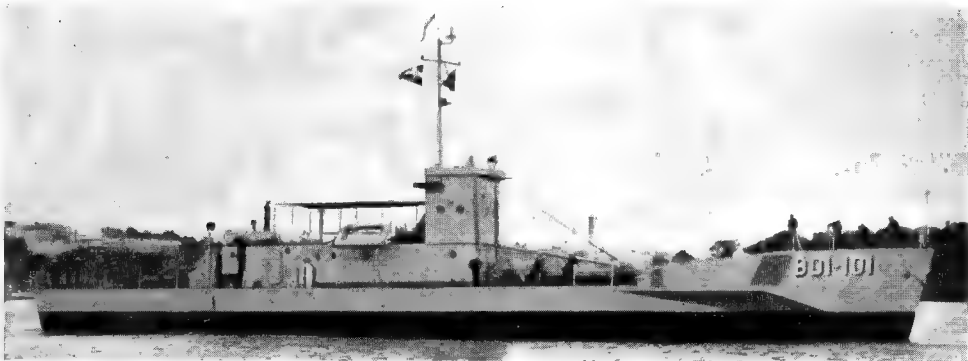
INDEPENDENCIA (ex- U.S. C.G.C. Icarus)

LIBERTAD (ex-Rafael Atoa, ex-U.S. C.G.C. Thetis)  
RESTAURACION (ex-U.S. C.G.C. Galathea)

Displacement 334-337 tons  
Dimensions : 165 × 25½ × 9½ feet  
Guns : 1—3 inch, 1—40 mm., 1—20 mm.  
Machinery : 2 Diesels. B.H.P. : 1,280 = 15 kts.  
Complement 35

Notes.—All launched 1931-32. Ex-United States Coastguard Cutters. Pendant Nos. P 105, P 106, P 104, respectively.

Infantry Landing Craft (*Barcazas de Desembarco de Infanteria*).



BDI 101.

1953, Official.

BDI 101 (ex-LC/L 40, Dec. 1, 1942)

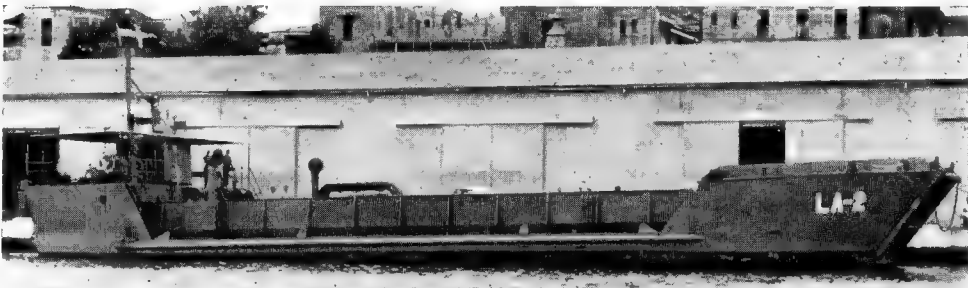
BDI 102 (ex-LC/L 43, Dec. 10, 1942)

BDI 103 (ex-LC/L 1006)

Displacement : 387 tons  
Dimensions : 153 (w.l.), 158½ (o.a.) × 23½ × 5½ feet  
Guns : 3—20 mm. AA., 2 M.G.  
Machinery : G.M. Diesels. 2 shafts. B.H.P. : 2,320 = 14 kts  
Complement : 24

Notes.—BDI 101 and BDI 102 built by New York S.B. Corp., Camden, N.J. Launch dates above. BDI 103 (ex-Quetzal, ex-Fantasma) transferred from Dominican mercantile marine in 1952.

Auxiliary Landing Craft (Rated as *Lancha Auxiliar*).



SAMANA.

1951 Official.

SAMANA

Dimensions 120 × 32 × 4 feet  
Machinery : 3 sets Diesels. B.H.P. : 225 = 7 kts.  
Complement : 12

Notes.—Ex-Tank Landing Craft. No armament. Pendant No. LA.2.

17 DE JULIO (ex-Waga Waga)

MARIA JOSEFINA

Dimensions : 114 × 32 × 4 feet  
Guns : 1 AA., 50 cal.  
Machinery : 3 Diesel motors. B.H.P. : 225 = 6 kts.  
Complement : 17

Notes.—Ex-Tank Landing Craft. Pendant Nos. LA 3 and LA 4, respectively. Of same type as Samana.



## Coastal Craft (*Guardacosta*).



GC 101.

1952, Official.

**PATRICIA** (ex-SC 1353, June 3, 1943)

**ROSA** (ex-SC 1351, March 11, 1943)

Displacement : 85 tons (130 tons full load)  
Dimensions : 107½ (w.l.), 111 (o.a.) × 17 × 6½ feet  
Machinery : Diesel, 2 shafts. B.H.P. : 4,000 = 19.5 kts.  
Fuel : 15 tons  
Complement : 20

Notes.—Built by Vineyard Boat Bldg. Co., Milford, Del. Launch dates above. Wood. Pendant Nos. GC 101, GC 102, respectively.

**GC 9**

**GC 10**

**GC 11**

Displacement : 47 tons  
Dimensions : 83 × 16½ × 4½ feet  
Guns : 2—20 mm., 2 M.G., 8 D.C.  
Machinery : Diesel. B.H.P. : 1,200 = 23.5 kts.

Notes.—Built by Wheeler Shipyards, Brooklyn, launched 1943. Wood. Ex-U.S.C.G. cutters 56197, 56198, 56199, respectively.



GC 8.

1951, Official.

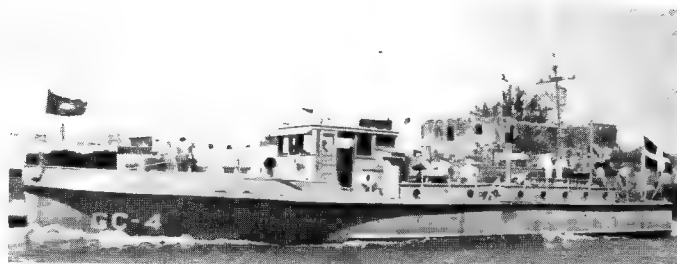
**GC 8**

Launched : 1941

Displacement : 28 tons  
Dimensions : 62 × 12 × 4 feet  
Machinery : Petrol motor. B.H.P. : 200 = 10 kts.

Notes.—Built in the Dominican Republic. Wood. No armament.

## Coastal Craft—continued.



GC 4

1953 Official.

**GC 3**

**GC 4**

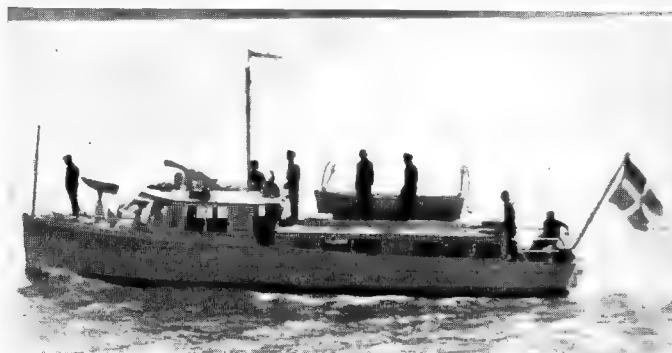
**GC 5**

**GC 6**

**GC 7**

Displacement : 37 tons  
Dimensions : 75 × 13½ × 4 feet  
Guns : 1—1 pdr., 1 M.G., 4 D.C.  
Machinery : Petrol motor. B.H.P. : 400 = 13.5 kts.

Notes.—These include the former CG 110, 144 and 302. Built in U.S.A. Launched 1924-25. Wood. GC 1 was withdrawn from service in 1950.



GC 2.

1948, Official.

**GC 2**

Launched : 1918

Displacement : 18 tons  
Dimensions : 45 × 11 × 3½ feet  
Guns : 2 M.G.  
Machinery : Petrol motor. B.H.P. : 200 = 9.5 kts.

Notes.—Ex-U.S. C—6049. Built in U.S.A. Wood. Completed in 1927.

## Coastal Craft, etc.—DOMINICAN REPUBLIC

### Rescue Launches (*Lanchas de Rescate*).



LR 102.

1948, Official.

**LR 101**

**LR 102**

**LR 103**

Displacement : 100 tons  
Dimensions : 92 (w.l.), 104½ (o.a.) × 19½ × 5½ feet  
Guns : 2—20 mm. AA., 2 M.G.  
Machinery : LR 101, 102 Diesel ; LR 103 2 Packard engines. 2 Shafts  
Complement : 20  
H.P. : 1,000 = 17 kts.

Notes.—Of wooden construction. All launched 1944.

### Training Ship (*Goleta Auxiliar*).

**DUARTE**

Measurement : 170.28 tons gross  
Dimensions : 121 × 23½ × 8½  
Machinery : 1 Diesel. H.P. : 200 = 6 kts.  
Complement : 12

Notes.—Built 1943 in Dominican Republic. Auxiliary sail training vessel. Pendant No. GA 1

### Auxiliary Motor Launch (*Lancha Auxiliar*).

**LAURA**

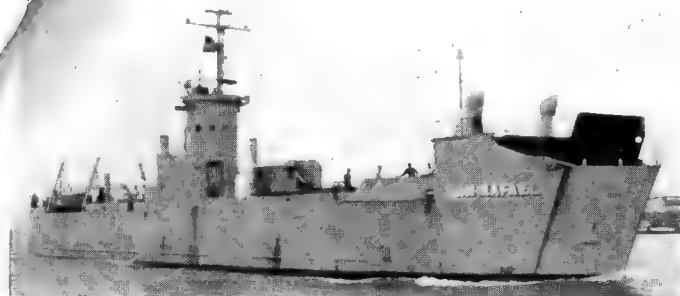
Dimensions : 38 × 8 × 5 feet  
Machinery : 2 petrol motors. H.P. : 320 = 25 kts.  
Complement : 5

Notes.—Built in U.S.A. No armament. Pendant No. LA 1.

Note.—Transport *Nuevo Dominicano*. (ex-New Nortland) foundered at Puerto Cayo Moa Cuba, 28 Nov. 1953.

## DOMINICAN REPUBLIC—Auxiliaries and Tugs

### Auxiliaries (Buques Auxiliares).



1953, Official

**SAN RAFAEL**

Displacement : 743 tons  
Dimensions : 203 × 34½ × 7 feet  
Machinery : 2 Diesel motors = 11 kts  
Complement : 36

Notes.—Ex-LSM. Pendant No. BA 103.



18 DE DICIEMBRE

1952, Official.

**18 DE DICIEMBRE**

Notes.—Apparently a converted patrol vessel of the United States WPC type, Pendant No. BA 101.



LEONOR

1952, Official.

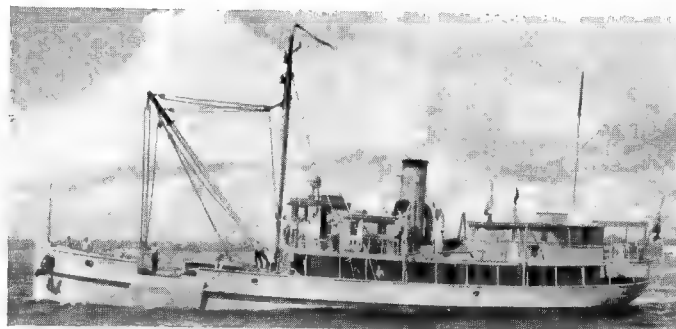
**LEONOR (ex-Romanita)**

Guns : 1 small

Note.—Pendant No. BA 102.

### Lighthouse and Buoy Tender.

(Buque de Faros y Boyas—Boyero).



CAPOTILLO

1953, Official.

**CAPOTILLO (ex-Camillia)**

Displacement : 337 tons  
Dimensions : 117 × 24 × 7½ feet  
Machinery : 2 Diesels. B.H.P. : 880 = 10 kts.  
Complement : 40

Notes.—Built in U.S.A. 1911. Acquired from U.S.C.G. 1949. Pendant No. FB 101.

### Fleet Oiler.



24 DE OCTUBRE.

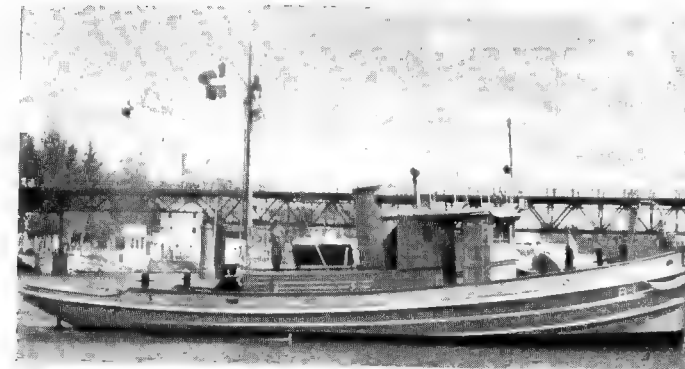
Added 1950, courtesy J. Meister.

**24 DE OCTUBRE (ex-YO 2)**

Displacement : 1,460 tons  
Dimensions : 180 × 30 × 13½ feet  
Machinery : 2 Diesels. B.H.P. : 480 = 8 kts. (Loaded speed)  
Capacity : 280,000 gallons  
Complement : 27

Notes.—Built in U.S.A. in 1943. Recently used by Government as a commercial carrier. Measurement : 602 tons gross. Pendant No. T 101.

### Tugs (Remolcadores).



R I.

1951, Official.

**R I**

Displacement : 40 tons  
Dimensions : 65 × 14 × 9 feet  
Machinery : 2 Diesel motors B.H.P. : 300 = 8 kts.  
Complement : 8

Note.—Built in U.S.A.



HERCULES.

1951, Official.

**HERCULES (ex-Heracles)**

Builders : Cammell Laird & Co. Ltd., England  
Launched : 1910

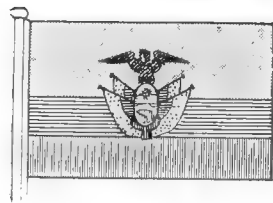
Displacement : 114 tons  
Dimensions : 81 × 19 × 9 feet  
Machinery : Triple expansion. 1 shaft. 1 H.P. : 385 = 10 kts.  
Complement : 10

Notes.—Transferred from Dominican mercantile marine in 1952. Pendant No. R 2.

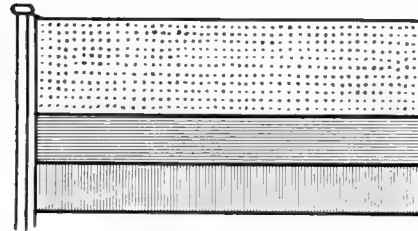
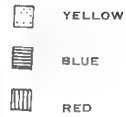
# ECUADOR

Flags, Uniforms, Silhouettes, Frigate, etc.—ECUADOR

## Flags.

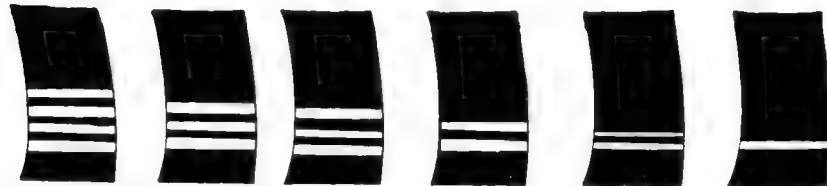


ENSIGN



MERCANTILE.

## Uniforms.



British  
Equivalent: —

Capitán de  
Navio

Captain.

Capitán de  
Fragata

Commander.

Capitán de  
Corbeta

Lieut.-  
Commander.

Teniente de  
Fragata

Lieutenant.

Alférez de  
Navio

Junior  
Lieutenant.

Alférez de  
Fragata

Sub-  
Lieutenant.

## Administration.

Chief of the Navy: Captain César Endara Peñaherrera.

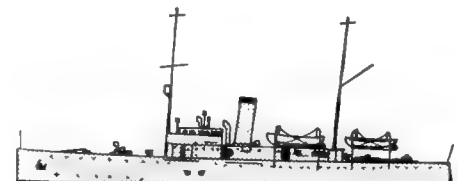
## Personnel

2,400 officers and men. Naval School: In Salinas, with United States instructors.

## Silhouettes.



GUAYAS.



PRESIDENTE ALFARO.

## Frigate.



Added 1950, courtesy J. Meister.

GUAYAS (ex-U.S.S. Covington)

Builders:	Globe, Superior
Laid down:	1 Mar. 1943
Launched:	15 Jul. 1943
Completed:	3 Aug. 1944
Displacement:	1,430 tons (2,415 tons full load)
Dimensions:	304 (o.a.) × 37½ × 13½ feet
Guns:	2—3 inch, 2—40 mm. AA., 4—20 mm. AA., 3 D.C.T.
Machinery:	Triple expansion. 2 shafts. I.H.P.: 5,500 = 20 kts.
Boilers:	2
Fuel:	290 tons

Notes.—Former U.S. patrol frigates PF 56. Purchased from U.S.A. in 1947. Similar in design to British "River" class frigates.

## Training Ship (Buque Escuela).



Added 1950, Official courtesy J. Meister.

PRESIDENTE ALFARO (ex-Ara)

Builders:	Camper & Nicholson, Southampton
Launched:	1917
Displacement:	1,030 tons standard
Dimensions:	213 (w.l.) × 31½ × 14½ feet
Guns:	2—3 inch, 4—5 M.G., 2 D.C.T.
Machinery:	2 Atlas Diesels. 2 shafts. B.H.P.: 2,400 = 14.5 kts.

Notes.—Former yacht. Purchased 1935. Refitted at Panama, 1940.

## ECUADOR—Coast Guard Vessels, etc.

### Patrol Vessels (*Guardacostas*).



MANABI,

Added 1950, Official, courtesy J. Meister.

**MANABI** (ex-Diez de Agosto, ex-U.S.S. *Opal*, ex-Coronet)

Launched : 1928  
Displacement : 590 tons (700 tons full load)  
Dimensions : 150 × 27 × 10 feet  
Guns : 2—3 inch, 4 —5 M.G.  
Machinery : Diesel. 2 shafts B.H.P. : 800 = 13 kts.

Notes.—Built in Germany. Ex-yacht, acquired from U.S. Navy in Sept. 1943.

The patrol vessel (ex-yacht) *Esmeraldas* was sunk at Guayaquil in Guayas river 7 Sept., 1953.

### Patrol Launches.

#### 3 New Construction.

Dimensions : Length : 75½ feet  
Machinery : M.A.N. Diesels. Speed : 20 kts.

Notes.—Six patrol launches were ordered from a German yard 1954, first two to be delivered August 1954, price of each about £35,000. Being built by Hermann Havighorst, Hamburg-Blumenthal.

### Transport.

**EL ORO** (ex-Cinco de Junio, ex-APC 85)

Displacement : 258 tons  
Dimensions : 98 (w.l.), 103½ (o.a.) × 21½ × ½ feet  
Machinery : Diesel. B.H.P. : 400 = 10 kts.  
Complement : 25

Notes.—Built 1943 in U.S.A. Purchased from U.S. Navy in 1943. Accommodation for 66 troops.

### Coast Guard Vessel.



ABDON CALDERON

Added 1950, courtesy J. Meister.

**ABDON CALDERON** (ex-Cotopaxi)

Built : Port Glasgow  
Launched : 1884  
Displacement : 300 tons  
Dimensions : 124½ (pp.), 135 (o.a.) × 22 × 9 feet  
Guns : 2—3 inch  
Machinery : I.H.P. : 175 = 8 kts. (present best speed). Oil fuel

Notes.—Built of iron. Is employed on Coast Guard duties, and as lighthouse tender.

### Lighthouse Tender.

**ATAHUALPA**

Built : Guayaquil  
Launched : 1927  
Displacement : 100 tons  
Dimensions : 74 × 17 × 5 feet  
Guns : 2 M.G.  
Machinery : Diesel. B.H.P. : 140 = 8 kts.  
Complement : 14

Notes.—Coast guard vessel. Employed as lighthouse tender.

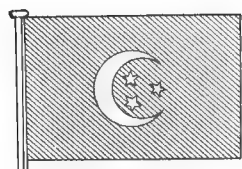
### Tug.

**COTOPAXI** (ex-R. T. Ellis)

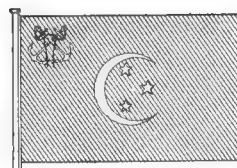
Builders : Equitable Building Co. Incorp.  
Displacement : 150 tons  
Dimensions : 82 × 21 × 8 feet  
Machinery : H.P. : 650 = 9 kts.

## EGYPT

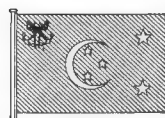
### Flags.



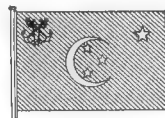
NATIONAL and MERCANTILE.



ENSIGN (worn as jack).



VICE-ADMIRAL



REAR-ADMIRAL



SENIOR NAVAL OFFICER

### Administration.

Minister of War and Marine : Wing Commander Abdel Latif Boghdadi.

Chief of Staff of the Navy : Rear Admiral Soliman Izzat.

### Personnel

1954 : 5,000 officers and men

### Mercantile Marine.

Lloyd's Register appendix, 1954 : 66 vessels of 110,914 tons gross.

### Uniforms.



Sayed Elbehar Elazam	Kabir Omara Elbehar	Amir Elbehar	Amir Elbahr	Miralai	Kaimakam	Bimbashi	Sagh	Youzbashi	Mulazim Awal	Mulazim Tani
British equivalent. Admiral of the Fleet	Admiral	Vice- Admiral	Rear- Admiral	Captain (senior)	Captain (junior)	Commander	Lieut.- Commander	Lieutenant	Lieutenant (junior)	Sub- Lieutenant

Non-executive branches are differentiated in usual way by coloured cloth between gold lace stripes, viz.,

Engineer officers :  
Supply officers :  
Surgeons :  
Scientific officers :

Purple  
White  
Scarlet  
Light blue

### Silhouettes.

Scale : 150 ft. = 1 inch.



DOMIAT.



MOHAMED ALI  
(IBRAHIM AWAL foremast as inset,  
no mainmast).



RASHEED.  
(ABIKIR similar but with yard on foremast higher).



PAPUA, TOBAGO.



TARIK.



EL SUDAN.



EGYPT—Frigates

3 Frigates (ex-British "River" Type).



DOMIAT. 1950, Wright & Logan.



RASHEED. 1950, Royal Egyptian Navy, Official.

ABIKIR (ex-Usk) DOMIAT (ex-Nith) RASHEED (ex-Spey)

Displacement : 1,460 tons (2,175 tons full load)  
Dimensions : 283 (pp.), 301½ (o.a.) × 36½ × 12 feet  
Guns : 2—4 inch, 2—40 mm. AA., 6—20 mm. AA.  
Machinery : Triple expansion. 2 shafts. I.H.P. : 5,500 = 20 kts.  
Boilers : 2 Admiralty 3-drum type  
Fuel : 440 tons  
Complement : 140

Notes.—Formerly of "River" class frigates in British Navy. Purchased from Great Britain. Officially transferred Nov., 1948. Abikir refitted by Camper & Nicholson's, Southampton, sailed for Egypt, April 1950. Domiat, refitted by Willoughby, Plymouth, sailed for Egypt, May 1950.

Pendant No.	Name	Builders	Laid down	Launched	Completed
42	Abikir	Smith's Dock Co. Ltd., Middlesbrough	6 Oct. 1942	3 Apr. 1943	14 July 1943
44	Domiat	Henry Robb Ltd., Leith, Scotland	5 Sept. 1941	25 Sept. 1942	16 Feb. 1943
43	Rasheed	Smith's Dock Co. Ltd., Middlesbrough	18 July 1941	18 Dec. 1941	19 May 1942

1 AA. Frigate (ex-British Sloop Type).



1951, A. & J. Pavia.

TARIK (ex-El Malek Farouq, ex-Whimbrel)  
Builders : Yarrow & Co., Ltd., Glasgow.  
Laid down : 31 Oct., 1941  
Launched : 25 Aug., 1942  
Completed : 13 Jan., 1943  
Displacement : 1,470 tons (1,925 tons full load)  
Dimensions : 300 × 38 × 9 feet  
Guns : 6—4 inch, 4—40 mm., 2—20 mm. AA.  
Machinery : Geared turbines. 2 shafts. S.H.P. : 4,300 = 19.75 kts.  
Boilers : 2, of 3-drum type  
Complement : 180

Notes.—Formerly of "Black Swan" class sloops (later re-rated frigates) in British Navy. Transferred from Great Britain, Nov., 1949. Pendant number 41. Broad band on funnel as flotilla leader, and thinner flotilla band.

2 AA. Frigates (ex-U.S. Type).



Ex-PAPUA (ex-Howett) Ex-TOBAGO (ex-Hong Kong, ex-Holmes)  
Displacement : 1,318 tons (2,000 tons full load)  
Dimensions : 304 (o.a.) × 37½ × 12 feet  
Machinery : Triple expansion. 2 shafts. I.H.P. : 5,500 = 18 kts.

Notes.—Closely duplicate British "River" class frigates. Lease-Lent to United Kingdom and served in British Navy as "Colony" class frigates. Returned to United States after the war, declared surplus by Navy in 1948 and sold out of service. Acquired by Egypt as passenger vessels and reported might be refitted as naval units, but they were laid up. Still have original mounts for 3-inch and smaller guns. In 1954 nothing had been done to them, though it is still said to be the intention of the Egyptian Navy to re-convert them to warships.

Name	Builders	Laid down	Launched	Completed
Ex-Papua	Walsh-Kaiser, Providence	7 Sept. 1943	10 Oct. 1943	25 July 1944
Ex-Tobago	Walsh-Kaiser, Providence	7 Aug. 1943	27 Sept. 1943	12 Aug. 1944

2 Fast Frigates (ex-British Escort Destroyer Type).



IBRAHIM AWAL

1952, Wright & Logan.



MOHAMED ALI

1951, A. & J. Pavia.

MOHAMED ALI (ex-Mendip, ex-Lin Fu, ex-Mendip)

IBRAHIM AWAL (ex-Cottesmore)

Displacement : 1,000 tons (1,490 tons full load)  
Dimensions : 272½ (pp.), 280 (o.a.) × 20 × 7½ feet  
Guns : 4—4 inch, 2—40 mm., 2—20 mm. AA., 5—2 pdr.  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 19,000 = 27.5 kts  
Boilers : 2, of 3-drum type  
Complement : 146

Notes.—Mohamed Ali served in British Navy until May 1948, when she was transferred to Chinese Navy; she returned to the British Navy at Hong Kong a year later, but was transferred to the Egyptian Navy in Nov. 1949. Ibrahim Awal was officially transferred from Great Britain to Egypt in July 1950, and sailed for Egypt in April 1951, after a nine months' refit by J. Samuel White & Co. Ltd., Cowes. Mohamed Ali has thin band on funnel. Both "Hunt" class, Type I.

Pendant No.	Name	Builders	Machinery	Laid Down	Launched	Completed
12	Ibrahim Awal	Yarrow & Co. Ltd.	Yarrow & Co. Ltd.	12 Dec., 1939	5 Sep., 1940	29 Dec., 1940
11	Mohamed Ali	Swan Hunter	Wallsend Slipway Co.	10 Aug., 1939	9 Apr., 1940	12 Oct., 1940

1 A S Frigate (ex-British Corvette Type).



EL SUDAN.

1951, A. & J. Pavia.



EL SUDAN.

Added 1943, Lieut.-Com. W. A. Fuller, R.N.V.R.

EL SUDAN (ex-Mallow, ex-Partizanka, ex-Nada, ex-Mallow)

Builders : Harland & Wolff, Ltd., Belfast  
Laid down : 14 Nov., 1939  
Launched : 22 May, 1940  
Completed : 2 July, 1940

Displacement : 1,060 tons (1,340 tons full load)  
Dimensions : 190 (pp.), 205 (o.a.) × 33 × 14½ feet (max.)  
Guns : 1—4 inch AA., 1—2 pdr., 2—20 mm. AA.  
Machinery : Triple expansion. I.H.P. : 2,750 = 16 kts.  
Boilers : 2 S.E.  
Oil fuel : 230 tons  
Complement : 85

Notes.—Formerly of "Flower" class corvettes in British Navy. Taken over by Yugoslavia in 1943 (loaned). Returned to British Navy early 1949 and transferred to Egypt Oct. 28, 1949. Another vessel of this "Flower" type, the Misr (ex-S.S. Malrouk) was rammed and sunk by collision south of Suez 16th-17th May 1953.

EGYPT—Minesweepers, M.T.B.s, Launches, etc.

Fleet Minesweepers.

MATRU (ex-Stornoway)	NAOR (ex-Bude)
Displacement : 672 tons (900 tons full load)	
Dimensions : 180 (o.a.) × 28½ × 9½ feet	
Guns : 1—4 inch, 1—3 inch, 2—40 mm. AA. (4—20 mm. in Matru)	
Machinery : Triple expansion. 2 shafts. I.H.P. : 2,400 = 16 kts.	
Boilers : 2 Admiralty 3-drum type	
Complement : 60	

Notes.—Former "Bangor" class minesweepers acquired from Great Britain. Now rated as corvettes. Sister ship Sollum sank in heavy weather off Alexandria 7 March 1953.

Name	Builders	Laid down	Launched	Completed
Matru	Henry Robb Ltd.	17 Jul., 1940	10 Jun., 1941	17 Nov., 1941
Nasr	Lobnitz & Co. Ltd.	2 Apr., 1940	4 Sep., 1940	12 Dec., 1941

Motor Minesweepers.



DARFOUR.

1951 A. & J. Pavia.



ARISH	DARFOUR	KAISARIA	KORDOFAN	MALEK FUAD	NAHARIA	RAFAH	TOR
		Displacement : 215 tons					
		Dimensions : 136 (o.a.) × 24½ × 6 feet					
		Guns : 1—3 inch, (except 2149, 2175), 2—20 mm. AA					
		Machinery : Diesel. B.H.P. : 1,000 = 13 kts.					
		Fuel : 16 tons					

Note.—All single-funnelled except 2028, which has 2 funnels as above. One named Gaza, was lost on 26 July, 1950 as a result of fuel-tank explosion off Mersa Matruh. Ex-BYMS 2013, 2028, 2035, 2041, 2069, 2075, 2149, 2175, 2212.

Motor Torpedo Boats.

EL NASSER	EL ZAFER
Displacement : 100 tons	
Dimensions : 115 × 21½ × 5 feet	
Guns : Several light AA.	
Tubes : 4—18 inch tubes	
Machinery : 4 Packard engines. B.H.P. 5,000 = 27.5 kts.	
Complement : 30	

Notes.—Fairmile "D" Type. Acquired from Great Britain.

Motor Launches.

HAMZA (ex-ML 134)	SAB EL-BAHR	SAKER EL-BAHAR
Displacement : 65 tons		
Dimensions : 112 × 18½ × 4½ (max.) feet		
Guns : 1—40 mm., 2—20 mm. AA.		
Machinery : 2 Hall-Scott Defender engines. 2 shafts. B.H.P. 1,200 = 19 kts.		

Notes.—Fairmile "B" Type. Acquired from Great Britain. Reported 1953 that there are now only three Fairmile motor launches in the Egyptian Navy. These are said to be Nos. 251, 252 and 253. Two reported to have been sunk.

Tank Landing Ship.

AKA (ex-LST 178)	
Displacement : 2,140 tons (4,980 tons full load)	
Dimensions : 347½ × 55 × 13 feet	
Guns : 4—20 mm.	
Machinery : S.H.P. : 2,750 = 13 kts.	

Note.—Ex-United States LST.

Tank Landing Craft.

Nos. 1-20	
Displacement : 22 tons	
Speed : 11 kts.	

Note.—Of LCM type.

Yachts.

MAHROUSSA	
Builders : Samuda Bros., Poplar	
Launched : 1865	
Displacement : 4,561 tons	
Dimensions : 400 (pp.), 420 (w.l.), 477½ (o.a.) × 42½ × 17½ feet	
Machinery : 3 Parsons turbines. 3 shafts. S.H.P. : 5,500 = 16 kts.	
Boilers : 5 main and 1 auxiliary Inglis multi-tubular	
Oil fuel : 346 tons	
Complement : 164	

Notes.—Built of iron. Reconstructed by A. & J. Inglis, Glasgow, and reboilered 1905, and refitted in 1946-47 at Malta Dockyard. Reconstructed 1949-50 at Odero-Terni, Muggiano, at a cost of over £1,250,000. For sale at £2,000,000 in 1954.

INTISAR (ex-Fakhr el Bihar)	
Displacement : 1,069 tons	

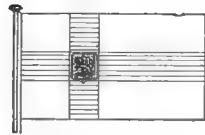
Transport.

EL QUSEIR (ex-El Amira Fawzia)	
Builders : Swan, Hunter & Wigham Richardson, Ltd., Wallsend	
Launched : 8 July 1929	
Displacement : 2,640 tons	
Dimensions : 275 × 36 × 14 feet	
Guns : 2—3 pdr.	
Machinery : Triple expansion. 2 shafts. I.H.P. : 2,130 = 14 kts.	
Boilers : 2 S.E. (working pressure, 180 lb.). Oil fuel	
Complement : 79	

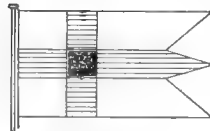
Notes.—Mercantile type. Fitted as transport for 400 men and 40 horses. Normally employed on coasting service carrying passengers Pendant No. 91.

# FINLAND

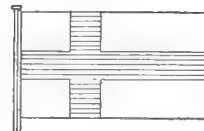
## Flags.



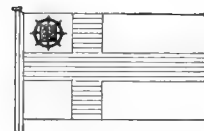
NATIONAL FLAG



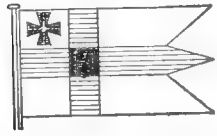
ENSIGN



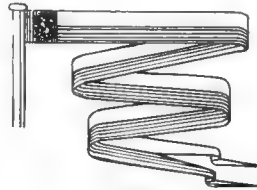
MERCANTILE



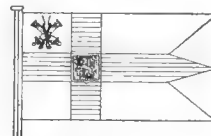
BOARD OF NAVIGATION



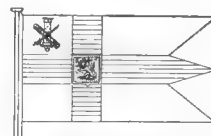
PRESIDENT'S STANDARD



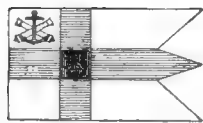
PRESIDENT'S PENDANT



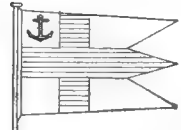
MINISTER OF DEFENCE



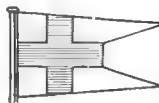
COMMANDER-IN-CHIEF OF DEFENCE FORCES



COMMANDER-IN-CHIEF OF NAVAL FORCES



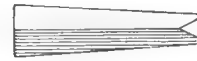
COMMANDER-IN-CHIEF OF NAVY



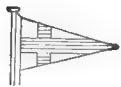
COMMANDER OF A SQUADRON



COMMANDER OF A FLOTILLA



COMMANDER OF A DIVISION



SENIOR OFFICER



PENDANT



JACK



Red



White



Blue



Yellow

*Note.*—Commander of a Flotilla has blue cross on white field as Commander of Squadron, but same shape as Commander of a Division. The Lion in the Flags is similar to that shown enlarged for the uniforms. In the Flags there are 9 conventional roses disposed about the Lion.

## Administration.

Minister of Defence : Mr. P. Hetimäki.

Naval Attaché, London : Lieut.-Colonel F. Olavi Seeve.

## Treaty Notes.

Under Treaty of Paris (Feb. 10, 1947), material strength must not exceed 10,000 tons, nor personnel 4,500. Finland must not possess submarines or M.T.B.s.

## Uniforms.



Amiraali.  
Admiral.

Vara-  
amiraali.  
Vice-  
Admiral

Kontra-  
amiraali.  
Rear-  
Admiral.

Kommodori.  
Commodore.

Komentaja.  
Captain.

Komentaja-  
kapteeni.  
Commander.

Kapteeni-  
luutnantti.  
Lieut.-  
Commr.

Yli-  
luutnantti  
Senior  
Lieutenant.

Luutnantti  
Lieutenant.

Ali-  
luutnantti.  
Sub-  
Lieut.



Colour of cloth between stripes :

Engineers :

Supply officers :

Surgeons :

Army officers in Naval Service :

purple ;

silver stripes and 1 silver star ;

red ;

green.

Device above upper stripe is the Lion of the Finnish Arms, as enlarged sketch reproduced herewith.

## Personnel.

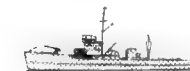
1,500 officers and ratings.

## Silhouettes.

(Scale : 150 ft.=1 inch)



RUOTSINSALMI.



PURUNPÄÄ Class.



TURSAS.

## Mercantile Marine.

Lloyd's Register appendix, 1954 : 343 vessels of 621,582 tons gross.

Shipping Register of the Finnish Board of Navigation, 1st Jan., 1954 :

613 vessels of 675,544 brt (ships above 19 brt).

FINLAND—Coastal Minelayer, Coastal Minesweepers, Motor Gunboats, etc.

Coastal Minelayer (Miinalaiva).



RUOTSINSALMI

Added 1949.

Builders : Hietalahden  
Launched: May, 1940  
Displacement : 300 tons  
Dimensions : 206 × 29½ × 6½ feet  
Guns : 1—40 mm. AA., 2—20 mm. AA.  
Mines : 100  
Machinery : 2 Rateau Diesels. B.H.P. : 1,120 = 15 kts.

Note.—The minelayer *Rautu* has been sold.

Motor Minesweepers (Raivaajat).



PURUNPÄÄ.

Official.

KATANPÄÄ (ex-BYMS 2047)  
PURUNPÄÄ (ex-BYMS 2044)

TAMMENPÄÄ (ex-BYMS 2032)  
VAHTERPÄÄ (ex-BYMS 2049)

Displacement : 215 tons  
Dimensions : 136 (o.a.) × 24½ × 6 feet  
Guns : 1—3 inch, 2—20 mm. AA.  
Machinery : Diesel. B.H.P. : 1,000 = 13 kts.

Notes.—Launched 1942. Wood. Originally Lend-Leased to Britain from U.S. Acquired by Finland 1948-49. Classified as patrol vessels (*vartiotalukset*) until 1952.

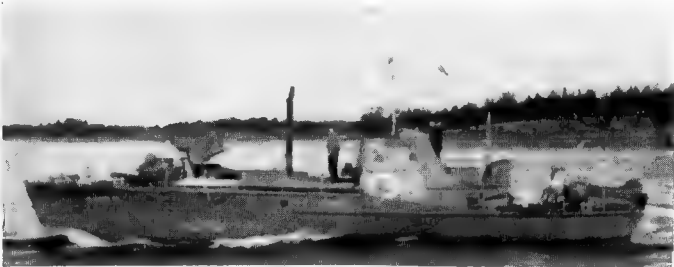
Motor Minesweeping Boats (Raivaajat).

AJONPÄÄ

KALLANPÄÄ

Launched : 1943-44  
Displacement : 40 tons  
Dimensions : 65½ × 16½ × 3½ feet  
Guns : 1—20 mm.  
Speed : 9 kts.

Notes.—Built in Denmark. Launched 1943-44. Fitted for magnetic minesweeping.



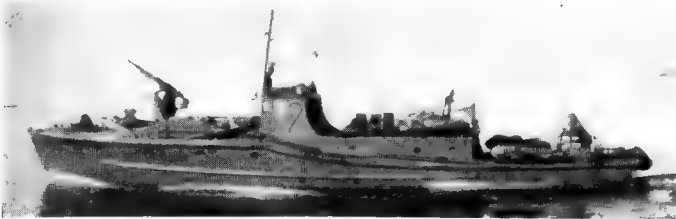
KUHA II.

1946, Official.

KUHA I 2 4 5 7 8 9 10 11 12 13 14 15 16 17 18

Displacement : 18 tons  
Dimensions : 56 × 12½ × 5 feet  
Guns : 1—20 mm.  
Speed : 9 kts.

Notes.—Built in Finland. Launched 1941-45.



AHVEN 2.

1946, Official.

AHVEN I 2 3 4 5 6

Displacement : 17 tons  
Dimensions : 56½ × 12 × 4½ feet  
Machinery : H.P. : 60 = 10.5 kts.  
Complement : 8

Notes.—Built at Turun Veneveistämö Yard. Launched 1936-37.

Motor Gunboats (Moottoritykkiveneet)



T 3.

1951, Official.

T 2 T 3 T 4 T 5 T 6 T 7 T 8  
Displacement : 22 tons  
Dimensions : 59 × 15½ × 5 feet  
Guns : 1—40 mm., 1—20 mm.  
Speed : 42 kts.

Notes.—All launched 1942-43. Ex-N 2-8.

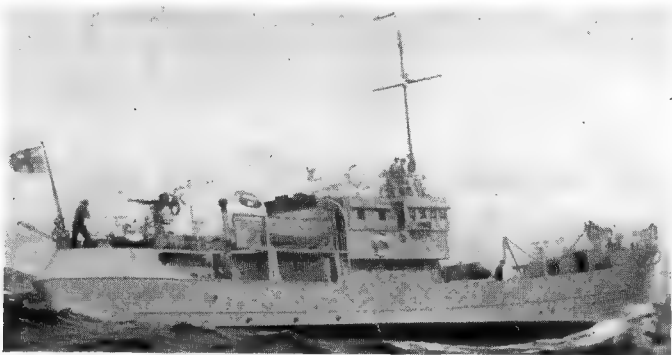
H 1 H 2 H 3 H 4 H 5  
Displacement : 20 tons  
Dimensions : 55½ × 14 × 4 feet  
Guns : 1—40 mm., 1—20 mm.  
Speed : 32 kts.

Note.—All launched 1941.

J 1 J 2 J 3 J 4  
Displacement : 22 tons  
Dimensions : 62½ × 15½ × 4½ feet  
Guns : 1—40 mm., 1—20 mm.  
Speed : 35 kts.

Notes.—All launched 1939. Ex-MAS 526-529. Above vessels are ex-MTBs.

Coast Guard Patrol Vessels (Vartiotalukset)



TURSAS

Official

Displacement : 360 tons  
Dimensions : 131½ × 23½ × 14 feet  
Guns : 2—20 mm. AA.  
Machinery : Diesel. Speed 12 kts.

Note.—Built by Crichton-Vulkan. Launched in 1933. Belongs to the Coast Guard, which is under the Ministry of the Interior.

AURA

Launched : 1907  
Displacement : 350 tons  
Dimensions : 128 × 23 × 11½ feet  
Guns : 1—3 inch, 2—20 mm. AA.  
Speed : 10 kts.



## Motor Patrol Boats (Vartiomoottoriveneet)

VMV 18	VMV 19	VMV 20
Displacement:	25 tons	
Dimensions:	69 × 13½ × 4 feet	
Guns:	1—20 mm.	
Speed:	11 kts.	

Notes.—Built in Finland. Launched 1935-43. Ex-Motor launches SP 1, 41, 42.



VMV 16	VMV 9	VMV 11	VMV 13	VMV 15	VMV 16
Displacement:	30 tons				
Dimensions:	82 × 13½ × 3½ feet				
Guns:	1—20 mm. AA.				
Machinery:	Semi-Diesel. B.H.P. : 1,220 = 25 kts.				
Complement:	9				

Notes.—Built in Finland. Launched 1935.

VMV 5	VMV 6
Displacement:	30 tons
Dimensions:	82 × 13½ × 3½ feet
Guns:	1—20 mm.
Machinery:	Benzol motors in VMV 5, semi-Diesel in VMV 6. H.F. 1,220 = 25 kts.
Complement:	8

Notes.—Built in Finland. Launched 1930-31. VMV 1 and VMV 2 sold 1952.

General Note.—All above VMVs belong to the Coast Guard which is under the Ministry of the Interior.

## Icebreakers (Jäänsarkijät).



VOIMA.

1954, Finnish Navy, Official.

VOIMA	Hietalahden telakka
Builders:	
Displacement:	4,415 tons
Dimensions:	254½ (w.l.), 274 (o.a.) × 63½ (61½ w.l.) × 20½ feet
Machinery:	Diesels with electric drive. 4 shafts. B.H.P. : 14,000 = 16½ kts.
Oil fuel:	740 tons
Complement:	73

Notes.—Launched and completed in 1953. Built for deep-sea work. Two propellers forward and two aft. A new icebreaker is projected.

## Icebreakers—continued



1940, Official.

SISU	Hietalahden telakka
Builders:	
Launched:	24 Sep., 1938
Displacement:	2,000 tons
Dimensions:	194½ (w.l.), 210½ (o.a.) × 46½ × 16½ feet
Guns:	2—3.9 inch AA.
Machinery:	3 sets Atlas Polar Diesels with electric drive. 2 shafts and a bow propeller. H.P. : 4,000 = 16 kts.
Complement:	100

TARMO (ex-Sampo II)	Armstrong
Builders:	
Launched:	1907
Displacement:	2,300 tons
Dimensions:	210½ (w.l.), 220 (o.a.) × 47 × 18½ feet
Machinery:	Triple expansion. 2 shafts. I.H.P. : 3,850 = 12 kts.
Complement:	43

SAMPO	Armstrong
Builders:	
Launched:	1898
Displacement:	1,850 tons
Dimensions:	202 × 43 × 18½ feet
Machinery:	Triple expansion. 2 shafts. I.H.P. : 3,850 = 12 kts.
Complement:	43

APU (ex-Avance)	Howaldt, Kiel
Builders:	
Launched:	1899
Displacement:	800 tons
Dimensions:	136 (p.p.), 144 (o.a.) × 35½ × 15 feet
Machinery:	I.H.P. : 1,385 = 10 kts.

MURTAJA	Stockholm
Built:	
Launched:	1890
Displacement:	815 tons
Dimensions:	137½ × 36 × 13 feet
Machinery:	Compound. H.P. : 1,130 = 11 kts.

Note.—Officially stated that above two old and weak ships of the icebreaker fleet will be discarded when the new icebreaker is ready or service.

General Notes.—All above icebreakers belong to the Board of Navigation. Another icebreaker, the Otso (see page 189, 1953-54 edition of *Fighting ships*) belongs to the town of Helsinki.

## Tenders.

PANSIO (1947)	PORKKALA (1940)	PUKKIO (1929)
Displacement:	162 tons	
Dimensions:	92 × 21½ × 9 feet	
Guns:	1—40 mm., 1—20 mm. AA.	
Speed:	10 kts.	

Notes.—Built at Naval Dockyard, Helsinki. Launch dates above.

## Tugs (Hinaajat).



1953, Official.

DR 2	DR 7	DR 11
Displacement:	106 tons	
Dimensions:	69 × 20 × 8½ feet	
Guns:	1—20 mm.	
Speed:	8 kts.	

Note.—Former United States Army tugs. Launched 1943-1944.

## Sail Training Ship (Koululaiva).



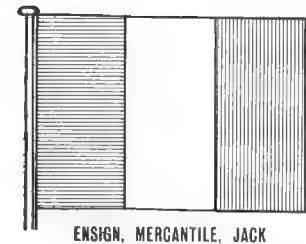
1950, Official.

<b>SUOMEN JOUTSEN</b> (ex-Oldenburgh, ex-Laennec)	
Displacement :	2,900 tons
Dimensions :	316½ × 40½ × 16½ feet
Sail area :	2,200 square metres
Machinery :	2 auxiliary Diesels. B.H.P. : 400 = 6 kts
Oil fuel :	40 tons
Complement :	27 + 60 cadets

Notes.—Built at St. Nazaire. Launched 1902. Originally French and subsequently a German schoolship. Purchased by Finnish Navy in August 1930.

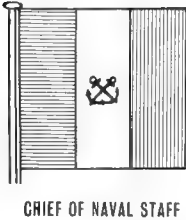
FRANCE

Flags.

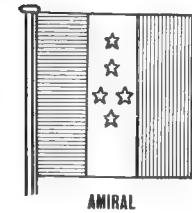


The President's Standard consists of the National Flag with the President's personal initials inscribed in the centre of the white

PRESIDENT



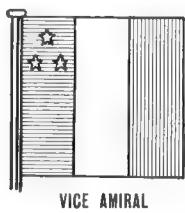
CHIEF OF NAVAL STAFF



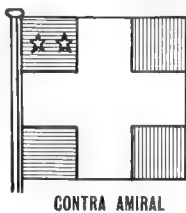
AMIRAL



VICE AMIRAL D'ESCADE



VICE AMIRAL



CONTRA AMIRAL



CAPITAINE DE VAISSEAU  
CHEF DE DIVISION



CAPITAINE DE VAISSEAU  
COMMANDANT DE GROUPE  
OU COMMANDANT DE LA MARINE



CAPITAINE DE FRÉGATE  
OU CAPITAINE DE CORVETTE  
COMMANDANT DE GROUPE



COMMANDANT SUPÉRIEUR  
TEMPORAIRE DE TOUT  
GRADE



PENDANT



Administration.

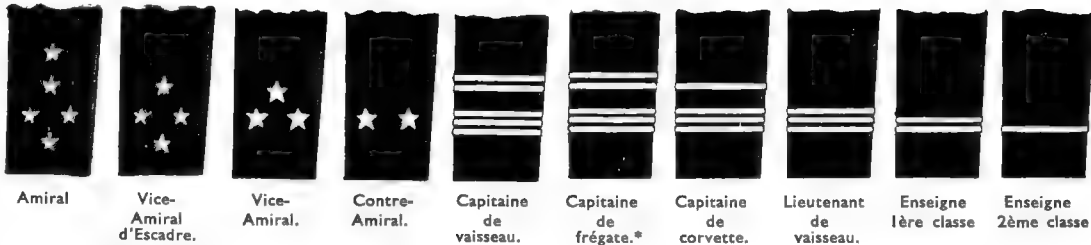
Minister of Defence : Général Pierre Koenig.  
Secretary of State for Navy : M. André Monteil.  
Chief of the Naval Staff : Amiral Henri Nomy, K.C.B.  
Deputy Chief of Naval Staff : Vice-Amiral M.M. Pothuau.  
Assistant Chief of Naval Staff : Vice-Amiral Gabriel Rebuffel.  
Assistant Chief of Naval Staff (Air) : Contre-Amiral Henri Ruysen

Naval Attaché, London : Contre-Amiral Y. M. R. Le Hâgre.

Personnel.

70,800 officers and men.

Uniforms.



Amiral Vice-Amiral d'Escadre. Vice-Amiral. Contre-Amiral. Capitaine de vaisseau. Capitaine de frégate.\* Capitaine de corvette. Lieutenant de vaisseau. Enseigne 1ère classe Enseigne 2ème classe

Corresponding to British Admiral. Vice-Ad. Rear-Ad. Captain. Commander. Lieut.-Commander. Lieut. Lieut. (junior). Sub-Lieut.

Amiral de la Flotte is equivalent to British Admiral of the Fleet. There is at present no holder of the rank.

\* Only three of the Capitaine de frégate's stripes are gold : the second and fourth are silver.

Aspirant, equivalent to Midshipman, has one gold stripe and 2 light blue patches.

Engineers	have similar stripes with violet			velvet between.
Paymasters	"	"	"	"
Medical Officers	"	"	"	"
Chemists	"	"	"	"
Constructors	"	"	"	"
Survey Corps	"	"	"	"
Ordnance Officers	"	"	"	"
Maritime Judicial Officers	"	"	"	"
Cypher and Interpreter Officers (reserve only)	"	"	"	"
Dental Officers (reserve only)	"	"	"	"

(Two latter do not wear more than four stripes).

Caps are similar to British in shape but badge differs, and there are stripes right round according to rank. The cocked hat carries the tricolour.

New Construction Programmes.

1949	1	2,700-ton destroyer.	1953	1	8,500-ton anti-aircraft cruiser.
	2	1,290-ton frigates.		5	2,700-ton destroyers.
	2	1,400-ton submarines.		2	1,290-ton frigates.
1950	1	2,700-ton destroyer.		2	400-ton submarines.
	2	1,290-ton frigates.		4	Coastal minesweepers.
	2	1,400-ton submarines.		4	Inshore minesweepers.
1951	4	2,700-ton destroyers.	1954	1	23,000-ton aircraft carrier.
	17	Coastal minesweepers.		3	1,000-ton frigates.
1952	6	2,700-ton destroyers.		2	1,200-ton submarines.
	7	1,290-ton frigates.		2	400-ton submarines and
	3	375-ton patrol vessels.			1,800 tons of tenders and auxiliaries.
	5	400-ton net layers.			

Mercantile Marine.

Lloyd's Register appendix, 1954 : 1,270 vessels of 3,829,414 tons gross.

# PENDANT NUMBERS

## CLASSIFICATION.

**D** = Destroyers (*Escorteurs Rapides*)

**F** = Frigates (*Escorteurs*)

**S** = Submarines (*Sous-marins*)

**M** = Minesweepers (*Drageurs*).

**P** = Patrol Vessels (*Patrouilleurs*).

**L** = Landing Ships.

**A** = Auxiliaries.

## D Flag Superior :

601 Marceau.  
602 Hoche.  
603 Kléber.  
604 L'Alsacien.  
605 Le Lorrain.  
606 Chateaurenault.  
607 Guichen.  
  
610 Le Fantasque.  
611 Le Terrible.  
612 Le Malin.  
613 Le Triomphant.  
614 Albatros.  
620 Surcouf.  
621 Kersaint.  
622 Cassard.  
623 Bouvet.  
624 Dupetit Thouars.  
625 Chevalier Paul.  
626 Maillé Brézé.  
627 Vanquelin.  
628 D'Estrées.  
629 Du Chayla.  
630 Casabianca.  
631 Guépratte.

## F Flag Superior :

701 Algérien.  
702 Sénégalais.  
703 Somali.  
704 Hova.  
705 Marocain.  
706 Tunisien.  
707 L'Aventure.  
708 La Surprise.  
709 L'Escarmouche.  
710 Croix de Lorraine.  
711 La Confiance.  
712 La Découverte.  
  
714 Mermoz.  
715 Le Brix.  
716 Le Verrier.  
717 Arabe.  
718 Kabyle.  
719 Bambara.  
720 Sakalave.  
721 Touareg.  
722 Soudanais.  
723 Berbère.  
724 Malgache  
  
730 Francis-Garnier.  
731 La Grandière.  
732 Dumont d'Urville.  
733 Savorgnan de Brazza.  
734 Chamois.  
735 Chevreuil.  
736 Gazelle.  
737 Bisson.  
738 Cdt. Amyot d'Inville.  
739 Cdt. Pimodan.  
741 Cdt. Delage.  
742 Cdt. Dominé.  
743 Cdt. Duboc.  
744 Le Boudeuse.  
745 La Capricieuse.  
746 La Gracieuse.  
747 La Moqueuse.  
748 Elan.  
  
750 La Pérouse.  
751 Beaupré.  
752 Amiral Mouchez.  
753 Marcel Le Bihan.  
754 O.E. Paul Goffeny.  
755 Cdt. Robert Giraud.  
  
760 Le Corse.  
761 Le Brestois.  
762 Le Boulonnais.  
763 Le Bordelais.

## S Flag Superior :

601 L'Andromède.  
603 L'Artemis.  
605 Junon.  
606 La Créole.  
607 L'Africaine.  
608 L'Astrée.  
609 Millé.  
610 Laubie.  
611 Blaison.  
612 Bouan.  
613 Roland Morillot.  
614 Sultane  
615 Sirene  
616 Saphir

621 Midget (Ex-No. 74.)  
622 „ (Ex-No. 90.)  
623 „ (Ex-No. 107.)  
624 „ (Ex-No. 365.)

## L Flag Superior :

9001 Laita.  
9002 Orne.  
9003 Vire.  
9004 Rance.  
9005 Odet.  
9006 Cheliff.  
  
9008 Golo.

## P Flag Superior :

601 Spahi.  
602 Grenadier.  
603 Goumier.  
604 Coutelas.  
605 Lansquenec.  
606 Dague  
607 Sabre.  
608 Cimeterre.  
609 Pique.  
610 L'Eveillé.  
611 Le Rusé.  
612 Voltigeur.  
613 L'Emporté.  
614 Mameluck.  
616 Lancier.  
617 Carabinier.  
618 Fantassin.  
619 Tirailleur.  
620 Dragon.  
621 Vigilant.  
622 L'Indiscret.  
  
624 Hussard.  
625 Légionnaire.  
626 Pnom Penh.  
627 Hue.  
628 Luang Prabang.  
629 L'Impetueux.  
630 L'Intrepide.  
631 Flamberge.  
632 Glaive.  
633 Mousquet.  
634 Trident.  
635 L'Ardent.  
636 L'Inconstant.

650 L'Ajaccienne.  
651 La Sétoise.  
652 La Toulonnaise.

658 Lotus.  
659 Tiaré.  
660 Alidade.  
661 Octant.  
662 Sentinelle.  
663 Estafette.  
664 Ing. Hyd. Nicolas  
665 Ing. Girod.

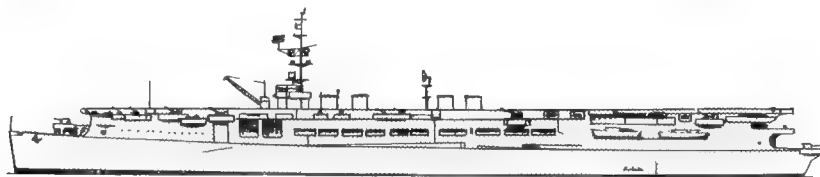
## M Flag Superior :

602 Oise.  
603 Somme.  
604 Yser.  
605 Ailette.  
606 Belfort.  
607 Laffaux.  
608 Vimy.

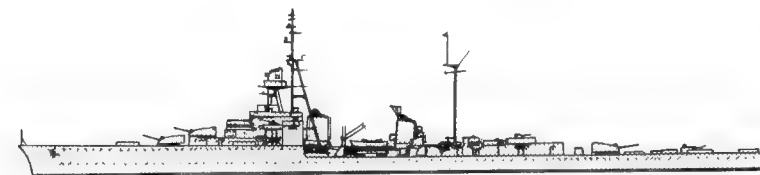
611 Ancre.  
612 Alençon.  
613 Berneval.  
614 Bir Hakeim.  
615 Cantho.  
616 Dompierre.  
617 Garigliano.  
618 Mytho.  
619 Vinh-long.  
621 Sirius.  
622 Rigel.  
623 Antares.  
624 Alcol.  
625 Aldebaran.  
626 Regulus.  
627 Vega.  
628 Castor.  
629 Pollux.  
630 Cassiopée.  
631 Eridan.  
632 Orion.  
633 Sagittaire.  
634 Achernar.  
635 Procyon.  
636 Arcturus.  
637 Betelgeuse.  
638 Acacia.  
639 Acanthe.  
640 Aconit.  
641 Amarante.  
642 Armoise.  
643 Asphodèle.  
644 Basilic.  
645 Dahlia.  
646 Pétunia.  
647 Clématite.  
648 Gentiane.  
649 Pimprenelle.  
650 Primevère.

## M Flag Superior—continued.

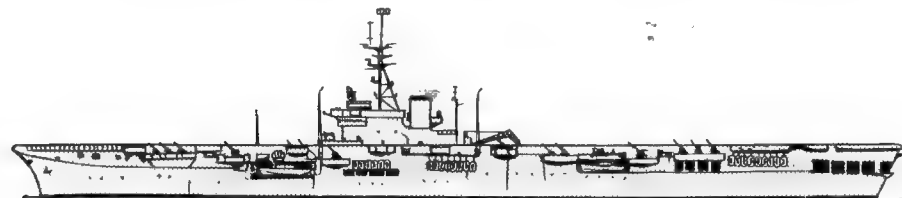
651 Genêt.  
652 Zinnia.  
653 Balsamine.  
654 Capucine.  
656 Marjolaine.  
659 Hortensia.  
660 Jonquille.  
661 Campanule.  
662 Hélioïtrophe.  
663 Jasmin.  
664 Perce-Neige.  
665 Anémone.  
666 Géranium.  
667 Ajonc.  
668 Azalée.  
669 Bégonia.  
670 Bleuet.  
671 Camélia.  
672 Chrysanthème.  
673 Coquelicot.  
674 Cyclamen.  
675 Eglantine.  
676 Gardenia.  
677 Giroflée.  
678 Glaieue.  
679 Glycine.  
680 Jacinthe.  
681 Laurier.  
682 Lilas.  
683 Liseron.  
684 Lobelia.  
685 Magnolia.  
686 Marguerite.  
687 Mimosa.  
688 Muguet.  
689 Myosotis.  
690 Alysse.  
691 Cillet.  
692 Paquerette.  
693 Pavot.  
694 Pervenche.  
695 Pivoine.  
696 Renoncule.  
697 Reseda.  
698 Roselys.  
699 Tulipe.



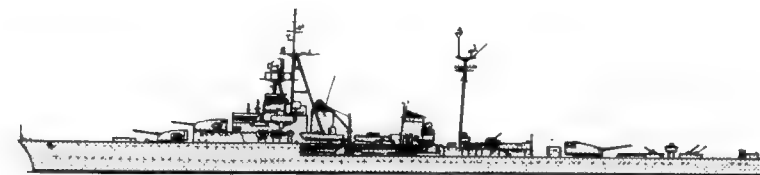
BOIS BELLEAU, LAFAYETTE.



GLOIRE



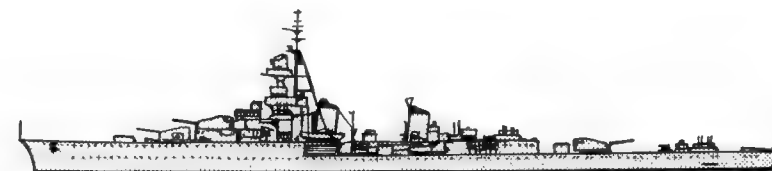
ARROMANCHES.



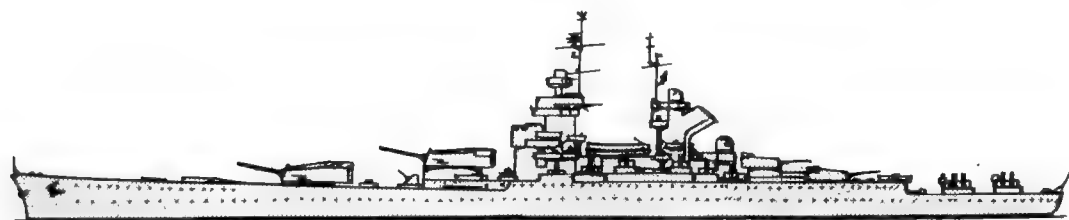
MONTCALM



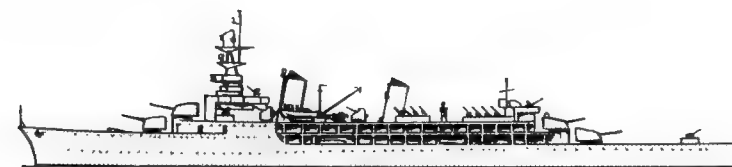
DIXMUDE.



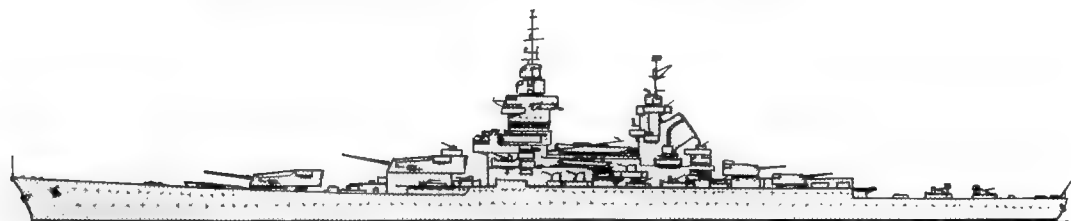
GEORGES LEYGUES



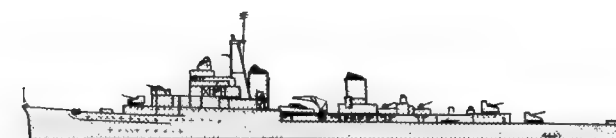
JEAN BART.



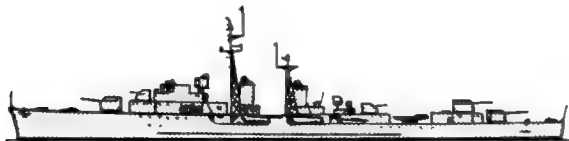
JEANNE D'ARC.



RICHELIEU.



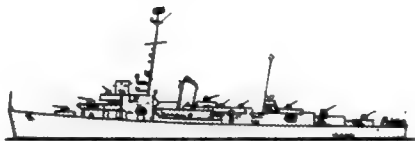
CHATEAUFORT, GUICHEN.  
(As converted to anti-submarine and anti-aircraft escorts.)



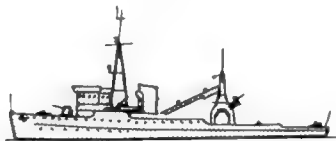
SURCOUF Class



L'ALSACIEN, (LE LORRAIN has bow gun replaced by asdic cabin)



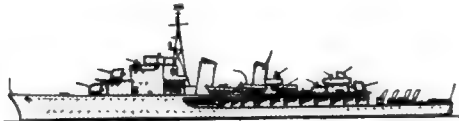
HOVA, TUNISIEN.



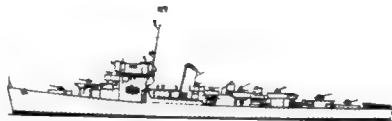
PAUL GOFFENY.



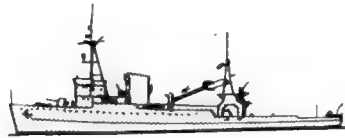
LE FANTASQUE Class.



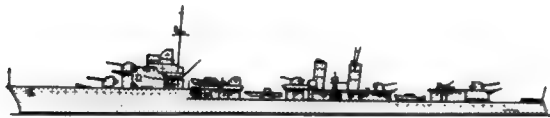
DUMONT D'URVILLE Class.  
(Minor differences)



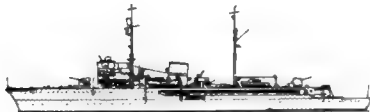
TOUAREG, SÉNÉGALAIS Class.



COMMANDANT ROBERT GIRAUD.



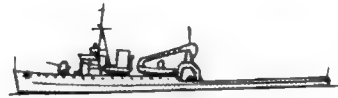
ALBATROS.



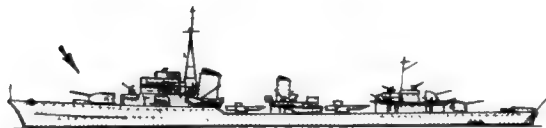
FRANCIS-GARNIER.



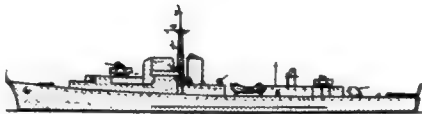
LE VERRIER Class.



MARCEL LE BIHAN.



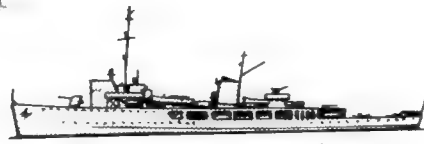
HOCHÉ



BORDELAIS Class.



BISSON Type.



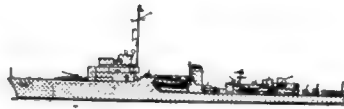
BEAUTEMPS-BEAUPRÉ, LAPÉROUSE.



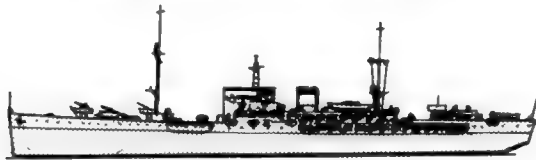
MARCEAU.



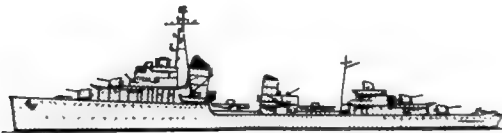
L'AVENTURE, LA DÉCOUVERTE.



CHEVREUIL Type



JULES VERNE.



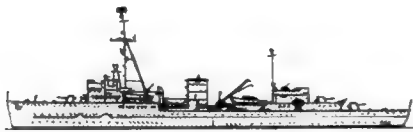
KLEBER.



LA CONFIANCE, CROIX DE LORRAINE, etc.



ELAN Class.



GUSTAVE ZÉDÉ.



FRANCE—Aircraft Carriers

I Large Light Fleet Type. New Construction.

CLEMENCEAU (P.A. 54)

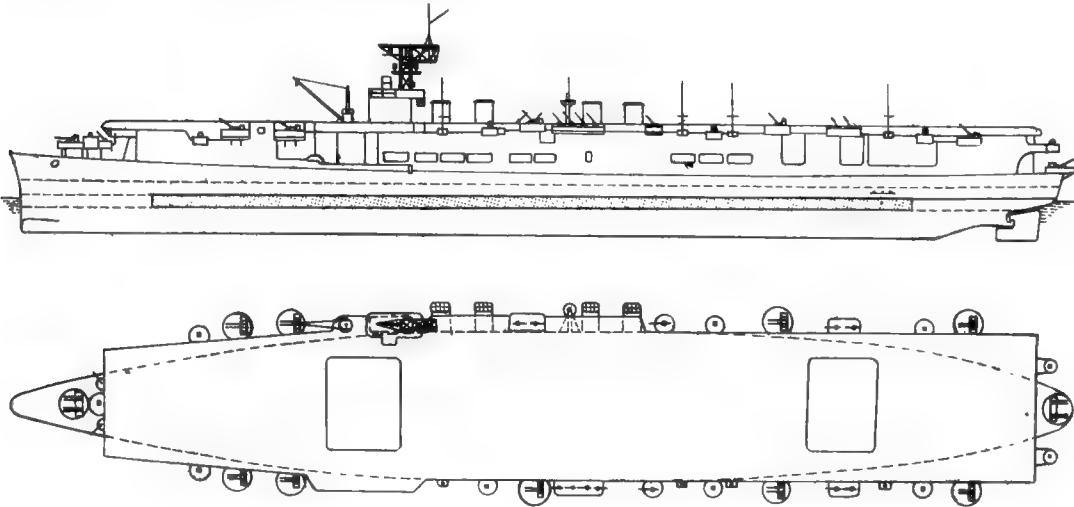
Builders :	Brest Dockyard
Ordered:	28 May 1954
Displacement :	22,000 tons standard
Dimensions :	833½ (pp.), 844½ (o.a.) × 141 × 26½ feet
Guns :	24—2.25 inch (57 mm.), Bofors AA. (twin mounts)
Aircraft :	About 60, including jet aircraft of the "Aquila" type
Machinery :	Geared turbines. S.H.P. : 126,000 = 32 kts.
Radius :	7,500 miles at 18 kts.
Complement :	2,500

Notes.—New construction authorised to be laid down in 1954. To have the angled deck incorporated, which accounts for her width.

2 Ex-U.S. Fast Light Fleet Type.

BOIS BELLEAU (ex-Belleau Wood, ex-New Haven) LA FAYETTE (ex-Langley, ex-Crown Point, ex-Fargo)

Displacement :	11,000 tons (15,800 tons full load)
Dimensions :	Length : 623 (o.a.) feet. Beam : 71½ (hull) feet. Width : 109 (extreme) feet. Draught: 26 (max.) feet.
Guns :	26—40 mm. AA., 10—20 mm. AA.
Armour :	2" Belt (5" on some vital points)
Aircraft :	26 carried
Machinery :	Geared turbines. 4 shafts. S.H.P. : 100,000 = 32 kts.
Boilers :	8 Babcock & Wilcox
Oil fuel:	2,000 tons.
Range :	11,000 miles at 15 kts. ; 5,800 miles at 25 kts.
Complement	1,183 (peace) ; 1,400 (war)



General Notes.—La Fayette was officially turned over to France on 6 June, 1951, under the Mutual Defense Assistance Program. Bois Belleau transferred to France by U.S. for 5 years, 5 Sep. 1953. Formerly units of United States "Belleau Wood" class fast light fleet aircraft carriers. Laid down as light cruisers of the U.S. "Cleveland" class but completed as aircraft carriers. Were originally designed to include four 5 inch guns in armament.

Aircraft Notes.—Maximum capacity when stowed is 101. In 1952 La Fayette carried "Avenger" (anti-submarine) and "Hellcat" aircraft.



LA FAYETTE.

1954, H. Emery.



LA FAYETTE.

1954, courtesy M. Henri Le Masson.

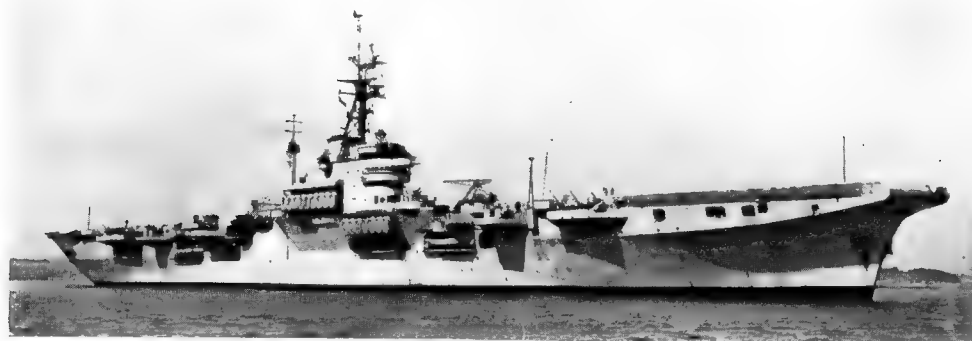


BOIS BELLEAU.

1954, Marius Bar.

Name	Builders and Machinery	Laid down	Launched	Completed
Bois Belleau	New York S.B. Corpn., Camden, New Jersey.	11 Aug. 1941	6 Dec. 1942	31 Mar. 1943
La Fayette		11 Apr. 1942	22 May 1943	31 Aug. 1943

# I Ex-British Light Fleet Type.

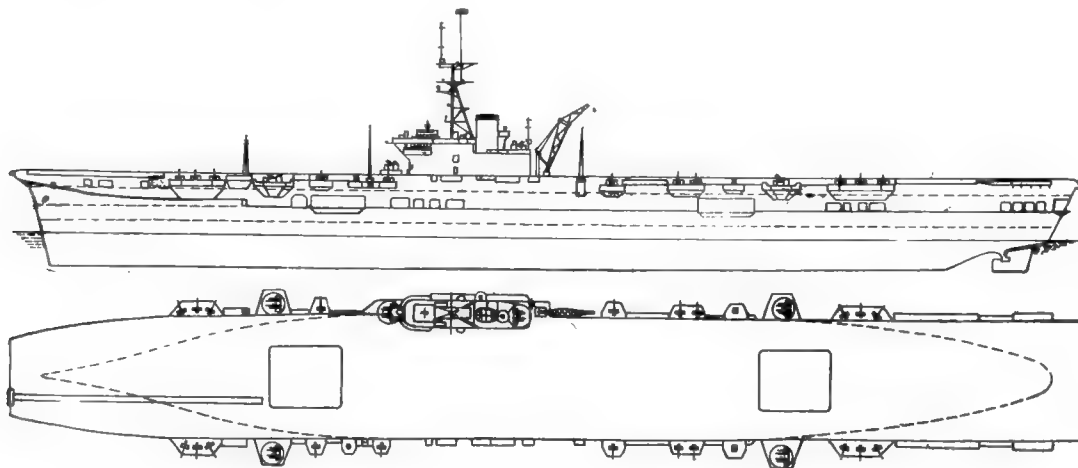


1949, Marius Bar.

## ARROMANCHES (ex-H.M.S. Colossus)

Builders : Vickers-Armstrongs, Ltd., (Tyne)  
Laid down : 1 Jun., 1942  
Launched : 30 Sep., 1943  
Completed : 16 Dec., 1944

Displacement : 13,190 tons (18,040 tons full load)  
Dimensions : Length : 694½ feet (o.a.). Beam : 80½ feet. Width : 112½ feet (o.a.). Draught : 23 feet  
Guns : 24—2 pdr., 19—10 mm. AA.  
Aircraft : Capacity : 39 to 43 (24 at present). American "Hellcat" fighters and "Helldiver" dive-bombers  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 42,000 — 25 kts. (designed), 23.5 kts. (actual)  
Boilers : 4, of 3-drum type (400 lb. working pressure, 700 degrees maximum superheat)  
Radius : 12,000 miles at 14 kts. ; 6,200 miles at 23 kts.  
Complement : 1,620



**General Notes.**—This ship was lent to the French Navy for five years' from August 1946 with the option of purchase in 1951, which was taken up, and she was permanently transferred from Great Britain in that year. Extensively refitted 1950-51.

**Engineering Notes.**—Engines and boilers are arranged *en echelon*, one turbine and two boilers being installed side by side in each of the two main propelling machinery spaces.

**Aircraft Notes.**—In 1952 aircraft comprising "Hellcats" (fighters) and "Helldivers" (dive-bombers) from U.S.A. were carried.

# I Ex-U.S. Escort Type (Rated as *Transport d'Aviation*).



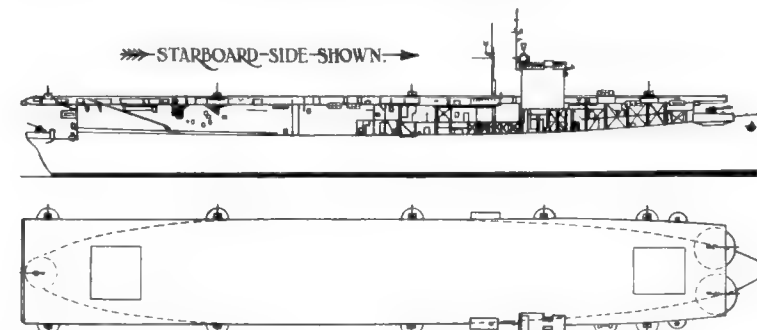
1950, courtesy M. Henri Le Masson.



Added 1950.

## DIXMUDE (ex-H.M.S. Biter, ex-Rio Parana)

Builders : Sun S.B. & D. Co., Chester, Pa.  
Launched : 18 Dec., 1940  
Displacement : 8,200 tons (15,500 tons full load)  
Dimensions : Length : 496 feet (o.a.). Beam : 69½ feet. Draught : 25½ feet (max.)  
Guns : 3—4 inch AA., 19—20 mm. AA.  
Aircraft : Capacity : 20 to 30, according to type.  
Machinery : 2 sets Doxford Diesels coupled on 1 shaft. B.H.P. : 9,000 = 16.5 kts.  
Radius : 30,000 miles at 10 kts. ; 20,000 miles at 15 kts.  
Complement : 408 (peace) ; 582 (war)



**Notes.**—Former U.S. escort carrier which served in British Navy under Lend-Lease terms during the Second World War, retransferred to the French Navy in January, 1945. Has been extensively used in 1949-52 as a ferry carrier between U.S.A. and France or France and Indo-China. Rated as Aviation Transport in 1951.

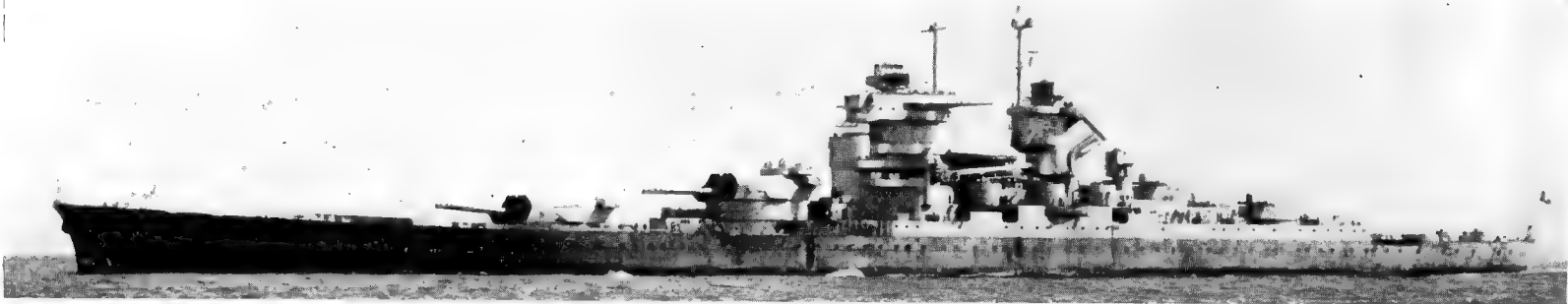
FRANCE—Battleships

Battleship.

(Rated as *Bâtiment de ligne*).

JEAN BART

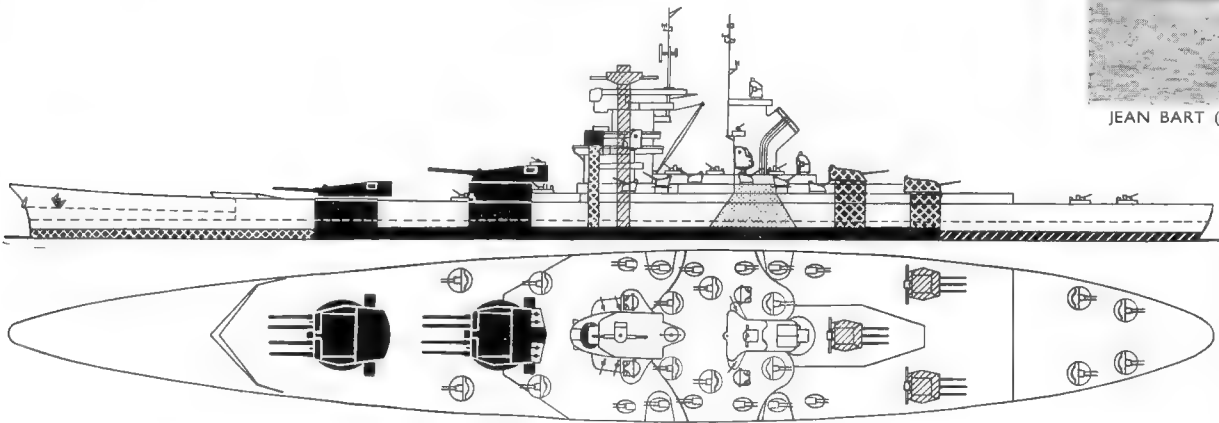
Builders : A.C. Loire  
Laid down : Jan., 1939  
Launched : 6 Mar., 1940  
Completed : 1949



JEAN BART (during her trials)

1950, French Navy, Official.

Displacement : 35,000 tons (*nominal*) ; 38,750 tons (*standard*) ; 49,000 tons (*full load*)  
Dimensions : Length : 813½ feet (o.a.). Beam : 116½ feet. Draught : 30 feet (32½ feet *full load*).  
Guns : 8—15 inch, 9—6 inch d.p., 24—3·9 inch d.p., 28—57 mm. AA., 20—20 mm. AA. (Oerlikon)  
Armour : 15½—8½" Belt, 6½—6" (upper armoured deck), 1½" (lower armoured deck), 17", 11½", 6½" and 5½" Main  
Turrets, 13½" Conning Tower  
Machinery : Parsons geared turbines. 4 shafts. S.H.P. : 150,000 = 30 kts. (On preliminary trials she reached 32 kts. with 160,000 S.H.P.)  
Boilers : 6 indret-Sural. Steam pressure 384 lbs./sq. in. Superheated 700°F.  
Oil fuel : 6,000 tons  
Radius : 8,500 miles at 14 kts., 6,900 miles at 20 kts., 3,400 miles at 30 kts.  
Complement : 70 officers, 1,600 ratings (peace) ; 88 officers, 2,055 ratings (war)

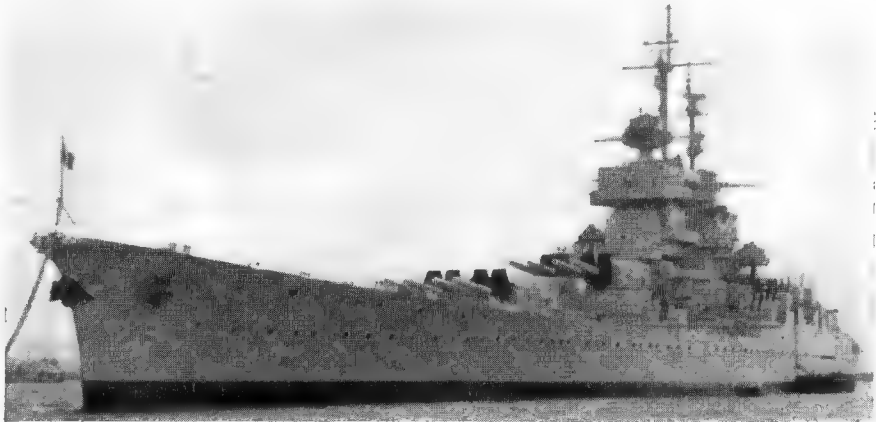


JEAN BART (after trials).

1950, French Navy, Official.

General Notes.—Having had bulges fitted, this ship has greater beam than *Richelieu*. Also has different type of bridge and improved AA. armament. When building at St. Nazaire (A.C. Loire shipyard), she succeeded in escaping in June, 1940, in an incomplete state and prior to any trials, and arriving at Casablanca, where she stayed during the war. Building was resumed in 1945 at Brest Navy Yard, and she ran her first sea trials in Jan. 1949. Excellent and most elaborate radar equipment is installed, rendering her suitable for employment as a "command vessel." Commissioned in April 1950 for gunnery trials and exercises, and her long-delayed AA. armament was mounted during winter of 1951-52.

Gunnery Notes.—57 mm. guns are of a new model.



JEAN BART.

1954, French Navy, Official

# Battleship.

(Rated as *Bâtiment de ligne*).

## RICHELIEU

Builders : Brest  
Engineers : Loire  
Laid down : 22 Oct., 1935  
Launched : 17 Jan., 1939  
Completed : Jul., 1940

Displacement : 35,000 tons designed ; 38,500 tons actual (48,500 tons full load)  
Dimensions : Length : 794 (pp.), 813½ (o.a.) feet. Beam : 108 feet 7 inches. Draught : 26½ feet (mean)  
Guns : 8—15 inch, 9—6 inch C.P., 12—4 inch AA., 60—40 mm. AA., 14—20mm. AA.  
Armour : 16" 9" Belt, 8" Deck (upper and lower combined), 17"—13" Main Turrets, 5" Secondary Turrets, 13" C.T. (See notes)  
Machinery : Parsons geared turbines, 4 shafts. S.H.P. : 150,000 = 30 kts. (In service she has reached 32.5 kts. with 179,000 S.H.P.)  
Boilers : 6 Indret-Sural. Steam pressure 384 lbs. sq. in. Superheated 700-F.  
Oil fuel : 6,000 tons  
Radius of action : 8,500 miles at 14 kts. ; 6,900 miles at 20 kts. ; 3,400 miles at 30 kts.  
Complement : 1,670 (peace) ; 1,946 (war)



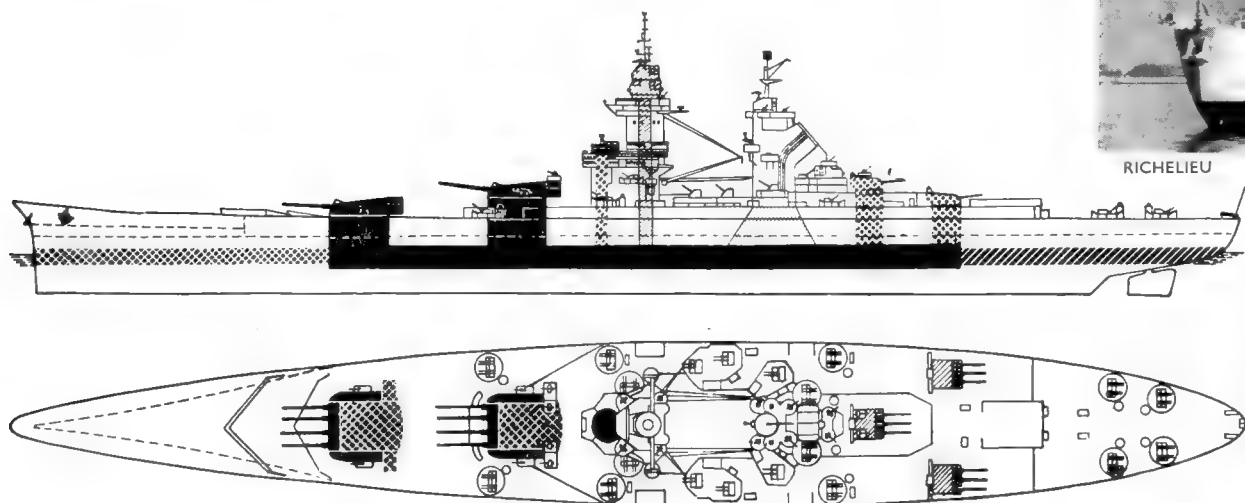
RICHELIEU.

1954, courtesy M. Henri Le Masson.



RICHELIEU

1953, French Navy, Official.



*General Notes.*—Ordered under 1935 programme. Extensively refitted 1951. Employed as gunnery training vessel at Toulon.

*Armour Notes.*—Proportion of displacement devoted to armour is 40 per cent. higher than in any previous ships (total weight of armour, 14,000 tons : total weight of machinery, over 3,000 tons)

*Class Notes.*—Both *Richelieu* and *Jean Bart* were built in dry dock, their cost exceeding 2,000,000,000 francs each. *Jean Bart* built in Loire yard, but construction shared by Penhoët concern. Uncompleted hull of a third ship, *Clemenceau*, was sunk by Allied heavy bombers during siege of Brest. A fourth ship, the *Gascogne*, was projected, but never begun.



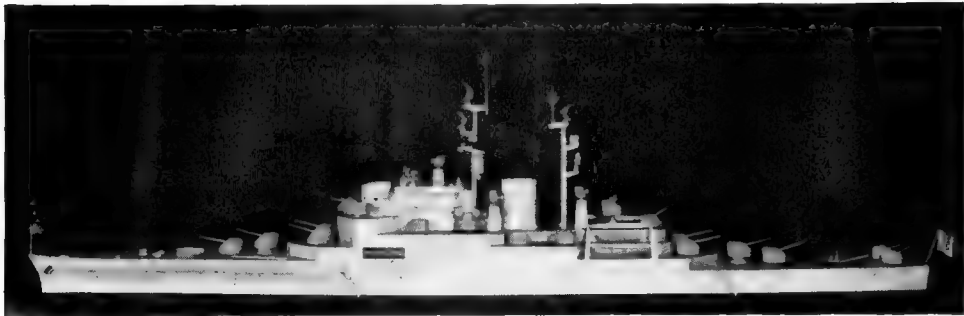
RICHELIEU.

1954, Marius Bar.

FRANCE—Anti-Aircraft Cruisers

Anti-Aircraft Cruiser.

I New Construction.

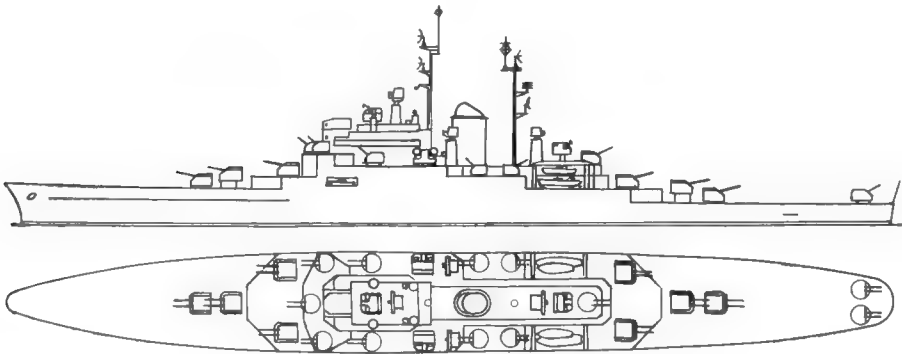


COLBERT (official model).

1954, Photo courtesy M. Henri Le Masson.

COLBERT

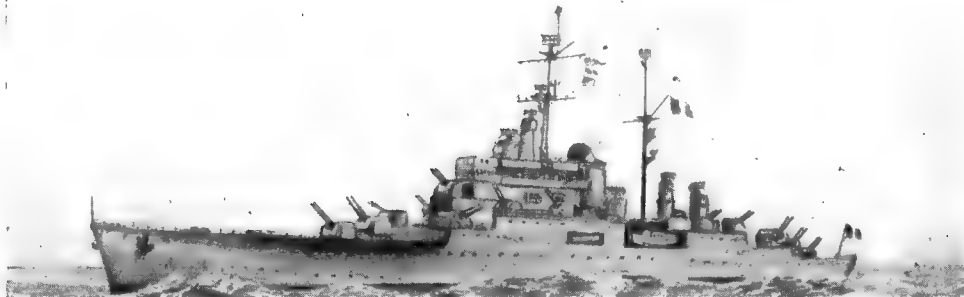
Displacement : 8,500 tons (11,000 tons full load)  
Dimensions : Length : 574½ feet. Beam : 63½ feet  
Guns : 16—5 inch AA. (twin mounts), 24—57 mm. Bofors AA. (twin)  
Aircraft : 1 helicopter  
Armour : See notes  
Machinery : 2 shafts. S.H.P. : 86,000 = 32 kts.  
Radius : 4,000 miles at 25 kts.



Notes.—Improved De Grasse type. Provision has been made in the design so that she can be fitted eventually with air-guided missiles. Will have new protection, quite different from that of De Grasse, and a platform for a helicopter. Construction started in Brest dockyard, Dec. 1953.

Anti-Aircraft Cruiser.

I “De Grasse” Class.



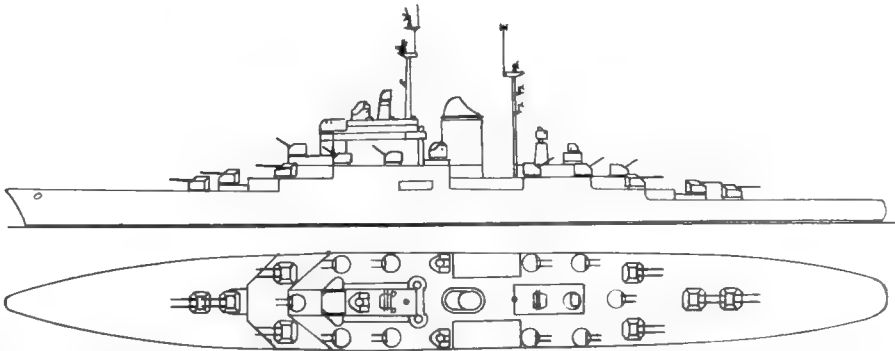
Artist's Impression.

1952, C. W. E. Richardson

DE GRASSE

Builders : Lorient Dockyard  
Engineers : A. & C. de Bretagne  
Laid down : Nov., 1938  
Launched : 11 Sep., 1946

Displacement : 9,000 tons (11,300 tons full load)  
Dimensions : Length : 592 feet. Beam : 60½ feet. Draught : 18½ feet (mean)  
Guns : 16—5 inch AA., 20—57 mm. AA. Bofors twin mounts  
Armour : Generally similar to “Gloire” class.  
Machinery : Rateau-Chantiers de Bretagne geared turbines. 2 shafts. S.H.P. : 120,000 = 33.5 kts.  
Boilers : 4  
Complement : 1,074 (78 officers and 1,010 men with Admiral on board)



General Notes.—Ordered under 1937 Estimates. Construction suspended during enemy occupation of Lorient, but resumed in 1946 until launch. Building then again stopped pending study of new anti-aircraft equipment and owing to financial situation. Construction again resumed on 9 Jan., 1951. Being completed in Brest dockyard as an anti-aircraft cruiser to modified design with modern armament. She was to have started her first acceptance trials, 1 Aug. 1954; but on 26 June 1954 she sank in dock immediately after being floated owing to a sea cock being left open.

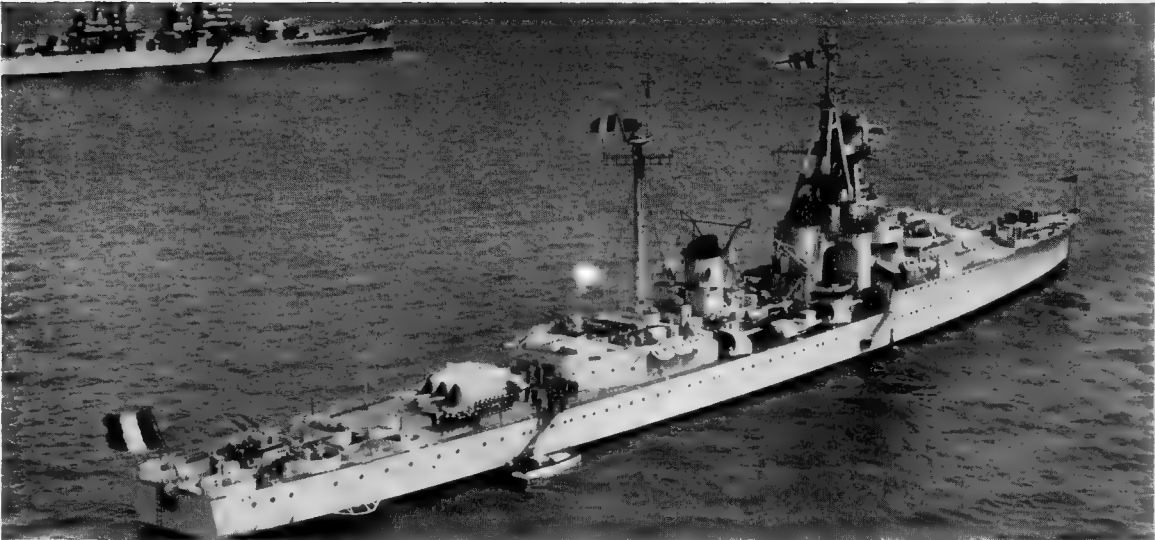


Cruisers.

3 “ Gloire ” Class.

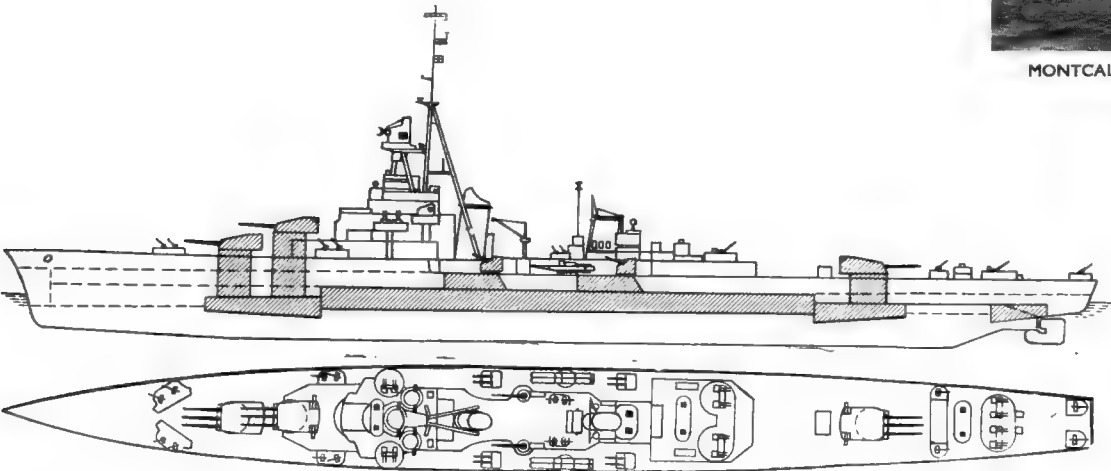
GLOIRE                      GEORGES LEYGUES (ex-Chateaufrenault)                      MONTCALM

Displacement : 7,600 tons (10,850 tons full load)  
Dimensions : Length : 548 (pp.), 580½ (o.a.) feet. Beam : 57½ feet. Draught : 17½ feet (max.).  
Guns : 9—6 inch, 8—3.5 inch AA., 24—40 mm. AA., 16—20 mm. AA.  
Tubes : 4—21.7 inch  
Armour (unofficial) : 4-3½" Vert. Side, 2½" Deck, 5½" Turret faces, 2" Turret sides, 3½" C.T.  
Machinery : 2 Rateau-Chantiers de Bretagne (Gloire only) or Parsons geared turbines. S.H.P. : 84,000 = 31 kts.  
Boilers : 4 Indret small tube  
Oil fuel : 1,870 tons  
Radius : 5,500 miles at 18 kts. ; 3,300 miles at 24 kts.  
Complement : 674 peace, 764 war



MONTCALM.

Added 1954, Skyfotos.

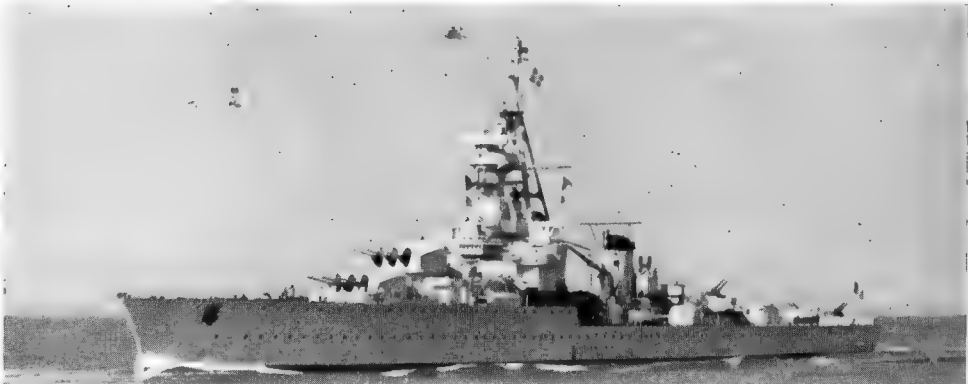


Note to Plan.—Gloire and Montcalm now have mainmast abaft after funnel (see photos and Georges Leygues will be similarly rigged in 1954.

General Notes.—Ordered under 1932 Programme. These ships resemble the Emile Bertin with additional protection which is said to be capable of resisting 6-inch shell. A feature of the design is the long quarter-deck. Altogether the design of these cruisers is a remarkably successful one, embodying the maximum advantage to be obtained from their relatively low displacement. Georges Leygues will have mainmast similar to Gloire. Three sister ships, La Galissonniere, Jean de Vienne, and Marseillaise, were scuttled at Toulon in Nov. 1942.

Engineering Notes.—Trials : Montcalm, 35.7 kts. Sea speed about 30 kts. Fuel consumption reported to be exceptionally low in this class. After her last refit in spring 1952 Montcalm steamed for two hours at 31.5 kts. at deep load.

Name	Builder	Machinery	Laid down	Launched	Completed
Gloire	F. C. Gironde	A. Ch. de Bretagne	1933	28 Sep., 1935	Dec., 1937
Georges Leygues	Penhoet, St. Nazaire	Penhoet, St. Nazaire	1933	24 Mar., 1936	4 Dec., 1937
Montcalm	F. C. Med.	F. C. Mediterranee	1933	26 Oct., 1935	Oct., 1937



GEORGES LEYGUES.

Added 1954, French Navy, Official

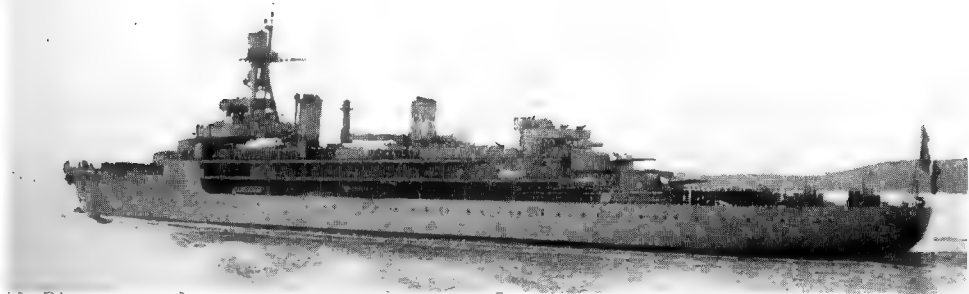


GLOIRE

1952, Lieut. Aldo Fraccaroli.

Cadets' Training Cruiser.

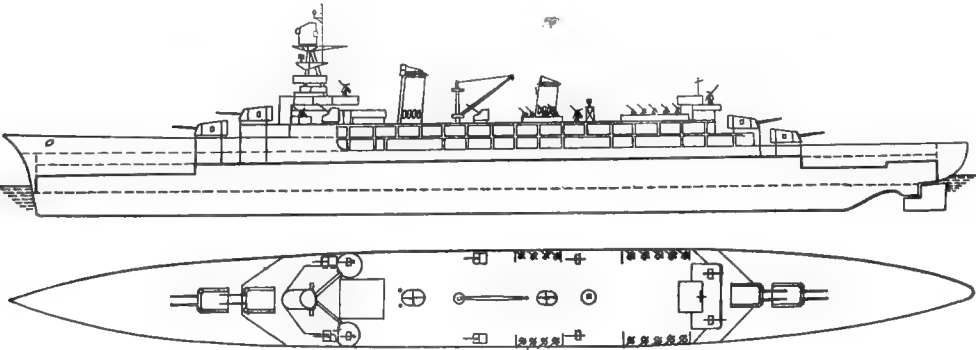
(Croiseur-Ecole).



Added 1953, courtesy M. Henri Le Masson

JEANNE D'ARC

Builders :	Penhoët, St. Nazaire
Laid down :	1928
Launched :	14 Feb., 1930
Completed:	Sep., 1931
Displacement :	6,496 tons standard (9,200 tons full load)
Dimensions :	Length : 525 (pp.), 557½ (o.a.) feet. Beam : 57½ eet. Draught : 17½ (mean), 20½ (max.) feet
Guns :	8—6.1 inch, 4—3 inch AA., 10—40 mm. AA., 20—20 mm. AA.
Armour :	Protective deck and light plating to gun-houses and conning tower
Machinery :	Parsons geared turbines. 2 shafts. Designed H.P. : 32,500 = 25 kts. (27.8 kts. on trials)
Boilers :	4 Penhoët
Oil fuel :	1,400 tons
Radius :	5,200 miles at 11 kts., 3,200 miles at 21 kts.
Complement:	506 (peace) ; 648 (war)



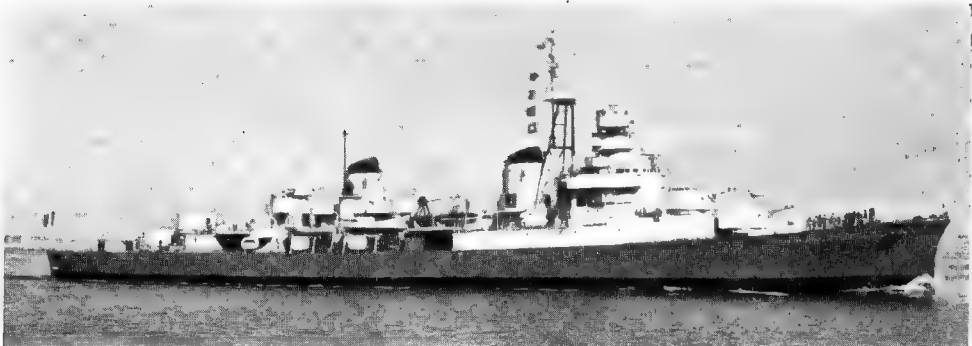
General Notes.—Authorized under 1927 Programme. This ship was specially designed for duty as a training cruiser and can accommodate 156 midshipmen and cadets and 20 instructional officers, in addition to ordinary complement.

Engineering Notes.—On 3 hours' full power trials developed an average of 39,200 S.H.P. = 27.03 (mean), 27.84 (max.) kts.

Anti-Submarine and Anti-Aircraft Leaders (Ex-Light Cruisers)

(Rated as *Escorteurs Rapides*)

2 "Chateaufort" Class.



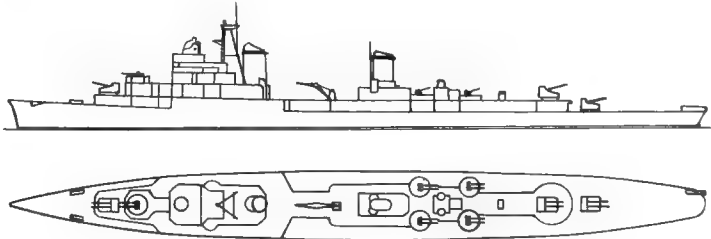
CHATEAUFORT (appearance now altered—see plan).

1949, Emery.

CHATEAUFORT (ex-Attilio Regolo)

Displacement :	4,835 tons (5,400 tons full load) officially revised figures.
Dimensions :	Length : 444½ (pp.), 455½ (w.l.), 456½ (o.a.) feet. Beam : 47½ feet. Draught : 15 (mean), 17½ (max.) feet
Guns :	6—4.1 inch AA. (ex-German) twin mounts, 10—57 mm. Bofors AA., twin mounts
Tubes :	New torpedo tubes
A/S weapons :	Extensive A/S armament
Armour :	Practically nil
Machinery :	2 sets geared turbines. 2 shafts. Designed S.H.P. : 120,000 = 41 kts. (trial speed 38.3 kts.)
Boilers :	4, of 3-drum type
Oil fuel :	1,400 tons
Radius :	6,800 miles at 10 kts. ; 3,600 miles at 18 kts. ; 1,800 miles at 30 kts.
Complement:	420 war (329 peace)

GUICHEN (ex-Scipione Africano)



Notes.—Former Italian light cruisers. Acquired in 1948 as France's share of surrendered Italian tonnage. These ships were lightly constructed with alloy superstructure, strength having been sacrificed to speed, but are good sea-boats. Originally equipped for minelaying. They are being modernised and fitted as fast A.S. and AA. cruisers with new main armament of the excellent ex-German 105 mm. pattern. Rebuilding for ASV is equivalent to the United States hunter-killer-ship *Norfolk* (Destroyer Leader). Reconstruction of both was undertaken by F.C. Méditerranée, La Seyne Dockyard in summer 1951. Recommissioned for trials July, 1943

Name	Builder	Laid down	Launched	Completed	Converted
Chateaufort	O.T.O., Leghorn	28 Sep., 1939	28 Aug., 1940	14 May, 1942	1 Apr., 1954
Guichen	O.T.O., Leghorn	28 Sep., 1939	12 Jan., 1941	18 Feb., 1943	1 July, 1954

# Destroyers

17 New Construction Fast AA. Type (Rated as *Escorteurs Rapides*).



SURCOUF.

1954, French Navy, Official.

BOUVET  
CASABIANCA  
CASSARD  
CHEVALIER PAUL

D'ESTRÉES  
DU CHAYLA  
DUPETIT THOUARS  
DUPERRÉ

FORBIN  
GUÉPRATTE  
JAURÉGUIBERRY  
KERSAINT

LA BOURDONNAIS  
MAILLÉ-BRÉZÉ  
SURCOUF  
TARTU  
VAUQUELIN

Displacement : 2,750 tons standard (3,700 tons full load)  
Dimensions : 420 (o.a.) × 41½ × — feet  
Guns : 6—5 inch AA. (twin mounts), 6—2.25 inch (57 mm.) AA., 6—20 mm. AA.  
Tubes : 12—21.7 inch in four triple mountings (6 for ordinary and special ASM torpedoes, 6 for ASM homing torpedoes only).  
A S weapons : New anti-submarine equipment  
Machinery : 2 Geared turbines, 2 shafts. S.H.P. : 63,000 = 34 kts. (60,000 S.H.P. : = 32 kts. at full load)  
Boilers : 4 (500 lb. sq. in. working pressure superheated steam 725°F.) in two boiler rooms separated by one turbine compartment  
Oil fuel : 700 tons  
Radius : 5,000 miles at 18 kts.  
Complement : 347

Notes.—One authorised under 1949 Programme, one 1950, four 1951, eight 1952. These vessels, very largely inspired by the successful *Volta* and *Mogador* of 1939, were designed as *Escorteurs Rapides Anti-aérien*, but re-rated as *Escorteurs de Première Classe* in 1951 and as *Escorteurs Rapides* in 1953. Latest electronic appliances provided. Named after famous French sailors.

Constructional Notes.—Hull entirely welded, assembled from 84 prefabricated sections with a total weight of 1,100 tons. Light alloys used extensively for upperworks.

General Notes.—5 inch gun (a new calibre in the French Navy) was chosen to facilitate ammunition supply so that these guns will be able to use standard American ammunition.

Name	Builders	Laid down	Launched	Completed
Bouvet	Lorient	Nov. 1951	3 Oct. 1953	June 1954
Casabianca	A.C. Bretagne	Oct. 1953	June 1954	Feb. 1955
Cassard	A.C. Bretagne	Nov. 1951	12 May 1953	June 1954
Chevalier Paul	F.C. Gironde	Feb. 1952	28 July 1953	Aug. 1954
D'Estrees	Brest	May 1953	1954	Feb. 1955
Du Chayla	Brest	July 1953	1954	Apr. 1955
Duperré	Lorient	1954	1955	1955
Dupetit Thouars	Brest	Mar. 1952	4 Feb. 1954	Sep. 1954
Forbin	Brest	1954	1955	1955
Guépratte	F.C. Gironde	Aug. 1953	July 1954	June 1955
Jauréguiberry	F.C. Gironde	Apr. 1954	Mar. 1955	Nov. 1955
Kersaint	Lorient	June 1951	3 Oct. 1953	May 1954
La Bourdonnais	Brest	1954	1955	1955
Maille-Brezé	Lorient	Mar. 1953	1954	Nov. 1955
Surcouf	Lorient	Feb. 1951	3 Oct. 1953	Nov. 1953
Tartu	A.C. Bretagne	May 1954	Oct. 1955	Aug. 1956
Vauquelin	Lorient	Mar. 1953	1954	Mar. 1955

# Destroyers

Ex-Light Cruiser Type (Rated as *Escorteurs Rapides*).

4 Fantasque Class.



LE MALIN.

1952, Marius Bar.



LE TRIOMPHANT.

1948, French Navy, Official.

LE FANTASQUE	LE MALIN	LE TERRIBLE	LE TRIOMPHANT
Displacement : 2,600 tons (3,750 tons full load)	411½ (pp.), 434½ (o.a.) × 39½ × 14 (mean) feet	5—5.5 inch and (Le Fantasque) 8—40 mm. AA., 8—20 mm. AA., 4 D.C.T. ; (Le Terrible, Le Malin)	8—40 mm., 10—20 mm., 4 D.C.T. ; (Le Triomphant) 11—40 mm. AA., 8—20 mm. AA., 4 D.C.T.
Dimensions : 6—21.7 inch (tripled)	2 sets geared turbines. Parsons in Le Malin and Le Triomphant ; Rateau-Chantiers de Bretagne in others. S.H.P. : 74,000 = 37 kts. (See Engineering Notes)	4 small tube, constructed by Penhoët, A. C. Loire and Babcock	650 tons
Guns : 6—21.7 inch (tripled)	2 sets geared turbines. Parsons in Le Malin and Le Triomphant ; Rateau-Chantiers de Bretagne in others. S.H.P. : 74,000 = 37 kts. (See Engineering Notes)	4 small tube, constructed by Penhoët, A. C. Loire and Babcock	650 tons
Tubes : 6—21.7 inch (tripled)	2 sets geared turbines. Parsons in Le Malin and Le Triomphant ; Rateau-Chantiers de Bretagne in others. S.H.P. : 74,000 = 37 kts. (See Engineering Notes)	4 small tube, constructed by Penhoët, A. C. Loire and Babcock	650 tons
Machinery : 2 sets geared turbines. Parsons in Le Malin and Le Triomphant ; Rateau-Chantiers de Bretagne in others. S.H.P. : 74,000 = 37 kts. (See Engineering Notes)	4 small tube, constructed by Penhoët, A. C. Loire and Babcock	650 tons	220
Boilers : 4 small tube, constructed by Penhoët, A. C. Loire and Babcock	650 tons	220	
Oil fuel : 650 tons	220		
Complement : 220			

General Notes.—All 1930 Programme. Formerly rated as light cruisers (*Croiseurs Légers*). Re-rated as *Escorteurs de Première Classe* in 1951, and as *Escorteurs Rapides* in 1953. They were completely refitted in U.S.A., 1942-44. *Le Triomphant* may be cannibalised.

Engineering Notes.—On trials, *Le Terrible* reached record speed of 45.25 kts. with about 100,000 H.P., average for one hour being 44.9 kts. with 94,200 S.H.P. On her 8 hours' trial she averaged 43 kts. All the ships of this class are excellent sea-boats, able to maintain high speed continuously. Present best speed (loaded condition) is 35 kts.

Appearance Notes.—No mainmast in these ships w.c. aerials being slung from brackets on second funnel. Since 1948 have a very small tripod abaft second funnel.

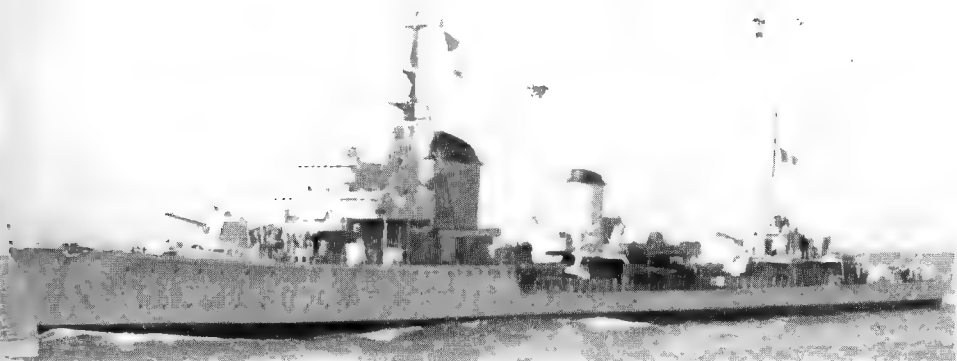
Name	Builders	Laid down	Launched	Completed
Le Fantasque	Lorient	Nov., 1931	15 Mar., 1934	1935
Le Malin	F. Ch. de la Méditerranée, La Seyne	Nov., 1931	17 Aug., 1933	1935
Le Terrible	Ch. Nav. Français, Blainville	Nov., 1931	30 Nov., 1933	1935
Le Triomphant	Ch. de France, Dunkerque	Nov., 1931	16 Apr., 1944	1935

Destroyers

5 Ex-German Type (Rated as *Escorteurs Rapides*)



HOCHÉ. Added 1954, courtesy M. Henri Le Masson.



MARCEAU. Added 1954, French Navy, Official.

HOCHÉ (ex-Z 25)

MARCEAU (ex-Z 31)

Displacement : 2,600 tons (3,700 tons full load)  
Dimensions : 388½ (pp.), 413½ (o.a.) × 38½ × 9½ (light), 16, (max.) feet  
Guns : Hoche : 3—5.9 inch forward, 2 aft, 8—40 mm. AA. (twin mounts) ;  
Marceau : 4—5.9 inch, 8—40 mm. AA., 8—20 mm. AA.  
Tubes : Hoche : 6—21.7 inch (two tripled) ; Marceau : 8—21 inch (two quadrupled)  
A/S Weapons : Hoche : New anti-submarine equipment. 2 D.C. mortars, 2 D.C. racks  
Mines : 30 to 40  
Machinery : Geared turbines. 2 shafts. S.H.P. : 70,000 = 37.75 kts. (32 kts. sea speed)  
Boilers : 6 Wagner, 176 lb. working pressure  
Oil fuel : 700 tons  
Radius : 3,200 miles at 16.5 kts., 2,500 miles at 19 kts., 1,900 miles at 22 kts.  
Complement : 245 (peace) ; 320 (war).

General Notes.—Acquired by French Navy in 1946. Formerly rated Contretorpilleurs. Re-rated *Escorteurs de Première Classe* in 1951, and as *Escorteurs Rapides* in 1953. Hoche was largely reconstructed 1952-53 ; her torpedo tubes are of the same model as those in the new destroyer *Surcouf*.

Gunnery Notes.—5.9 inch guns are not AA., having only 45 degrees maximum elevation. Armament has been modified recently.

Name	Builders	Laid down	Launched	Completed
Hoche	Deschimag, Bremen	Feb. 1939	1940	Dec. 1940
Marceau	Deschimag, Bremen	1940	1941	1942
Kleber	Krupp, Germania	1935	1936	July 1937
L'Alsacien	Schichau, Ebbing	1940	Nov. 1941	Dec. 1942
Le Lorrain	Schichau, Ebbing	1940	Nov. 1942	June 1943



KLEBER (ex-Theodor Riedel) 1954, Wright & Logan.

Displacement : 2,200 tons (3,400 tons full load)  
Dimensions : 371 (pp.), 381 (o.a.) × 37½ × 9½ (light), 15 (max.) feet  
Guns : 4—5 inch, 6—40 mm. Bofors AA., 8—20 mm. AA.  
Tubes : 8—21 inch  
Machinery : Geared turbines. 2 shafts. S.H.P. : 70,000 = 38.25 kts. (30-31 kts. at full load, 1952)  
Boilers : 6 Wagner  
Oil fuel : 700 tons  
Radius : 2,300 miles at 19 kts.  
Complement : 13 officers, 236 ratings.

Notes.—Formerly rated as Contretorpilleur. Re-rated *Escorteur de Première Classe* in 1951, and *Escorteur Rapide* in 1953.



LE LORRAIN. 1952, Marius Bar.

L'ALSACIEN (ex-T 23)

LE LORRAIN (ex-T 28)

Displacement : 1,100 tons (1,600 tons full load)  
Dimensions : 310 (pp.), 319 (o.a.) × 30 × 8½ feet  
Guns : 4—4.1 inch, (Lorrain 3—4.1 inch, see notes) 4—40 mm. AA., 18—20 mm. AA.  
Tubes : 6—21 inch, 6 D.C.T.  
Mines : Stowage for 70  
Machinery : Geared turbines. 2 shafts. S.H.P. : 35,000 = 32 kts.  
Boilers : 4 Wagner, 155 lb. sq. in. working pressure  
Oil fuel : 350 tons  
Radius : 2,600 miles at 15 kts.  
Complement : 143 (peace) ; 202 (war)

Notes.—Both refitted and recommissioned in June, 1949. Formerly rated as torpilleurs but re-rated *Escorteurs de Première Classe* in 1951 and as *Escorteurs Rapides* in 1953. Lorrain attached to the anti-submarine training establishment at Toulon for experiments with new torpedo tubes, now has a special Asdic compartment instead of her bow 4.1 inch gun. L'Alsacien is laid up and will probably never be commissioned again.

I Modified Destroyer Type (Rated as *Escorteur Rapide*).



ALBATROS

Builders : At. et Ch. de la Loire  
Laid down : 1929  
Launched : 28 Jun., 1930  
Completed : 1931  
Displacement : 2,436 tons (3,500 tons full load)  
Dimensions : 423½ × 40 × 16 feet  
Guns : 3—5.5 inch, 2—4 inch, 2—3 inch, 3—40 mm.  
Tubes : 3—21.7 inch  
Machinery : 2 sets Parsons geared turbines. S.H.P. : 30,000 = 25 kts  
Boilers : 2 Indret small tube  
Oil fuel : 440 tons  
Radius : 2,000 miles at 13 kts., 1,000 miles at 24 kts.  
Complement : 189

1949, Marius Bar, Toulon.

Notes.—Built under 1927 Programme. Formerly classed as Contretorpilleur (Destroyer). Reconstructed 1948, boiler power being halved. Tender to Gunnery School. Re-rated as *Escorteur de Deuxième Classe* in 1951, and as *Escorteur Rapide* in 1953.

I Ex-Italian Sloop Type (Rated as *Aviso Escorteur*).



FRANCIS GARNIER ex-Eritrea)

Builders : Castellammare  
Laid down : 25 Jul., 1935  
Launched : 19 Sept., 1936  
Completed : Jun., 1937

1954, Marius Bar.

Displacement : 2,172 tons (standard, 2,500 tons full load)  
Dimensions : 251½ (w.l.), 274 (o.a.) × 43½ × 11½ (mean) feet  
Guns : 3—4.7 inch, 4—40 mm. AA., 4—20 mm. AA.  
A/S Weapons : 2 D.C. mortars, 1 D.C. rack.  
Machinery : 2 Fiat Diesels, with electric drive to 2 Marelli motors. 2 shafts. H.P. : 8,000 = 20 kts.  
Fuel : 320 tons  
Complement : 231 (war)

Notes.—Designed by Engineer Major-General Icilio d'Esposito. Fitted for minelaying. Ordered May 8, 1935. Ex-Italian sloop type. Formerly rated as *Aviso de Première Classe*. Re-rated as *Escorteur de Deuxième Classe* in 1951, and *Aviso Escorteur* in 1953.

3 Tropical Sloop Type (Rated as *Avisos Escorteurs*).



LA GRANDIÈRE.

1953, R. M. Scott



SAVORGNAN DE BRAZZA

Added 1953, courtesy M. Henri Le Masson.

DUMONT D'URVILLE

LA GRANDIÈRE (ex-Ville d'Ys)

SAVORGNAN DE BRAZZA

Displacement : 2,000 tons standard (2,600 tons full load)  
Dimensions : 340 × 41½ × 14½ feet  
Guns : 3—5.5 inch, 4—40 mm. AA., 11—20 mm. AA.  
Mines : 40  
Machinery : 2 sets Sulzer Diesels. 2 shafts. B.H.P. : 3,200 = 15.5 kts.  
Fuel : 220 tons (La Grandière, 325 tons) + 60 tons for use in auxiliary boilers. Consumption at 10 averages 26.55 lb. per mile  
Radius : 13,000 miles at 8.5 kts., 7,600 at 15 kts.  
Complement : 135 peace, 194 war

Notes.—Authorised under 1927, 1928 and 1937 Programmes, respectively. Designed for tropical service, with a special arrangement for circulation of cool air. All are fitted as flagships. They have proved most efficient and reliable in service. Colonial sloop type. Formerly rated as *Aviso de Première Classe*. Re-rated as *Escorteur de Deuxième Classe* in 1951, and *Aviso Escorteur* in 1953.

Name	Builders	Laid down	Launched	Completed
Dumont D'Urville	F. et Ch. Gironde	1927	21 Mar., 1931	1932
La Grandière	A. C. Provence	1938	Jun., 1939	1940
Savorgnan de Brazza	C. M. Sud-Ouest	1929	18 Jun., 1931	1933



FRANCE—Frigates

Frigates

New Construction.

General Notes.—Officially stated that it has been decided that the French Navy needs a grand total of 73 new *escorteurs* (frigates). The 13 "Corse" class building or completing may be used as leaders, while for convoy duties 40 A/S frigates of the new "E54" type of 1,000 tons displacement with the same A.S. armament will be built, and 20 of the proposed escort vessels may be larger and equipped for both convoy duty and as colonial *avisos*.

3 + "E 54" Convoy Type.

E 54	E 55	E 56
	Displacement :	1,000 tons standard
	Dimensions :	292 x 31½ x — feet
	Guns :	4—40 mm. (twin mounts) AA.
	A. S. Weapons	Similar to "Corse" Class
	Machinery :	Geared turbines. 1 shaft S.H.P. : 15,000 = 25 kts.
	Radius :	4,500 miles at 12 kts.
	Complement :	150

Notes.—To be built at Lorient.

13 Oceangoing (A/S and AA.) E 50/52 Type (Rated as *Escorteurs*).

LE BORDELAIS LE BOULONNAIS	LE BRESTOIS LE CORSE	LE BRETON LE BASQUE	E 5 E 6	E 7 E 8	E 9 E 10	E 11
	Displacement :	1,290 tons, 1,528 tons for trials (1,702 tons full load)				
	Dimensions :	315 x 33½ x — feet				
	Guns :	6—2.25 inch (57 mm.) AA. (twin mounts), 2—20 mm. AA.				
	A/S weapons :	2 mortars, 1 D. C. rack, 1 quadruple lance-roquettes, 12 tubes (four triple) for new special homing torpedoes				
	Machinery :	Geared turbines, S.H.P. : 20,000 = 27 kts.				
	Radius :	4,500 miles at 15 kts.				
	Complement :	198				

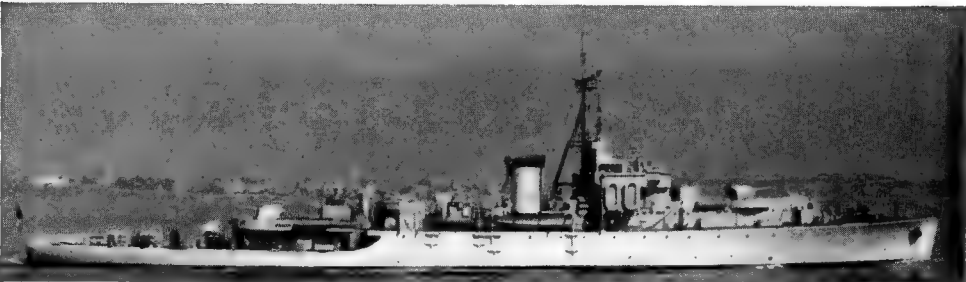
Notes.—Two authorised under 1949 Programme, two 1950, seven 1952, two 1953. Intended as seagoing convoy escort vessels with a very large radius of action. Designed as *Escorteurs Rapides Anti-Sousmarins*. Re-rated as *Escorteurs de Deuxième Classe* in 1951, and as *Escorteurs* in 1953. First four laid down end of 1951. Completion expected 1954-55. Design stated to resemble closely that of new U.S. D.E. *Dealy*. *Le Bordelais* started acceptance trials in August 1954.

Name	Programme	Builders	Launched	Completed
Le Bordelais	1950	F. Ch. de la Mediterranee	14 July, 1953	End 1954
Le Boulonnais	1950	A. C. Loire	12 May, 1953	
Le Brestois	1949	Lorient Navy Yard	15 Dec., 1952	
Le Corse	1949	Lorient Navy Yard	5 Aug., 1952	
E 5	1952	F. Ch. de la Mediterranee	13 Feb., 1954	
E 6	1952	F. Ch. de la Mediterranee		
E 7	1952	A. C. Loire	31 May, 1954	
E 8	1952	A. C. Loire		
E 9	1952	A. C. Loire		
E 10	1952	F. Ch. de la Mediterranee		
E 11	1952	Penhöt		
Le Breton	1953	Lorient Navy Yard		
Le Basque	1953	Lorient Navy Yard		

Frigates

Ex-British Type (Rated as *Escorteurs*).

6 "L'Aventure" Class.



L'AVENTURE

1954, H. Emery.



LA SURPRISE.

1954, Wright & Logan.

L'AVENTURE (ex-H.M.S. *Braid*)  
CROIX DE LORRAINE (ex-H.M.S. *Strule*, ex-Glenarm)  
LA DECOUVERTE (ex-H.M.S. *Windrush*)

L'ESCARMOUCHE (ex-H.M.S. *Frome*)  
LA SURPRISE (ex-H.M.S. *Torridge*)  
LA CONFIANCE (ex-Tonkinois, ex-H.M.S. *Mayola*)

Displacement :	1,365 tons (2,130 tons full load)
Dimensions :	301½ (p.p.), 305½ (o.a.) x 36½ x 12 feet
Guns :	2—4.1 inch, 2 or 3—40 mm., 6 or 8—20 mm. AA., 4 D.C.T. ( <i>La Con fiance</i> has 1—40 mm. AA. in the stern)
Machinery :	Triple expansion. 2 shafts. I.H.P. : 5,500 = 20 kts.
Boilers :	2, of 3-drum type
Oil fuel :	645 tons ( <i>Croix de Lorraine</i> , 440 tons)
Complement :	119 peace, 141 war

Notes.—All ex-British frigates of "River" type, purchased in 1943-44. Lattice masts in *Croix de Lorraine*, *L'Escarmouche* and *La Con fiance* tripod in *L'Aventure*, *La Decouverte* and *La Surprise*. Formerly rated as *Frégates*. Re-rated *Escorteurs de Deuxième Classe* in 1951 and as *Escorteurs* in 1953. *Tonkinois* renamed *La Con fiance* in 1953.

Name	Builders	Laid down	Launched	Completed
L'Aventure	Wm. Simons & Co., Ltd.	1 Dec., 1942	30 Nov., 1943	21 Jan., 1944
Croix de Lorraine	Henry Robb, Ltd.	15 Jul., 1942	8 Mar., 1943	30 Jul., 1943
La Decouverte	Henry Robb, Ltd.	18 Nov., 1942	18 Jun., 1943	3 Nov., 1943
L'Escarmouche	Blyth S.B. & D.D. Co., Ltd.	30 May 1942	1 Jun., 1943	3 Mar., 1944
La Surprise	Blyth S.B. & D.D. Co., Ltd.	17 Oct., 1942	16 Aug., 1943	6 Apr., 1944
La Con fiance	Smith's Dock Co., Ltd.	9 Feb., 1942	27 Aug., 1942	15 Jan., 1943

Frigates

Ex-U.S. Destroyer Escort Type (Rated as *Escorteurs*).

14 “Sénégalais” Class.



TUNISIEN.

1954, Marius Bar.

1st Group

**ALGÉRIEN** (ex-DE 107)  
**HOVA** (ex-DE 110)

**MAROCAIN** (ex-DE 109)  
**SÉNÉGALAIS** (ex-DE 106)

**SOMAL** (ex-DE 111)  
**TUNISIEN** (ex-DE 108)

2nd Group

**ARABE** (ex-Samuel S. Miles, DE 183)  
**BAMBARA** (ex-Swearer, DE 186)  
**BERBERE** (ex-Clarence L. Evans, DE 113)

**KABYLE** (ex-Riddle, DE 185)  
**MALGACHE** (ex-Baker, DE 190)  
**SAKALAVE** (ex-Wingfield, DE 194)

**SOUDANAIS** (ex-Cates, DE 763)  
**TOUAREG** (ex-Bright, DE 747)

Displacement : 1,275 tons (1,617 tons full load)  
Dimensions : 306 (o.a.) × 36½ × 10½ feet  
Guns : 1st Group : 3—3 inch dual purpose, 2—40 mm. Bofors, 12—20 mm. Oerlikon, 8 D.C.T.  
2nd Group and Marocain : 3—3 inch dual purpose, 6—40 mm., 18—20 mm., all in twin mounts  
A/S weapons : All have 1 hedgehog, 8 D.C. mortars, 2 D.C. racks  
Machinery : Diesel-electric. 2 shafts. B.H.P. : 6,000 = 19 kts. (economical speed 12 kts.)  
Radius : 11,500 miles at 11 kts., 5,500 at 19 kts.  
Complement : 150 peace, 185 war

**General Notes.**—First group acquired in 1944, first of six ships (*Sénégalais*) being commissioned Jan. 2, 1944. These were formerly rated as *Torpilleurs d'Escorte*, but re-rated *Escorteurs de Deuxième Classe* in 1951. Six more *DES* of same class transferred from U.S.A. in March 1950 under Atlantic Pact. *Arabe* and *Kabyle* turned over to France 12 Aug. 1950. *Bambara* and *Sakalave* turned over later. *Soudanais* and *Touareg* delivered at Nice Nov. 1950. *Berberé* and *Malgache* transferred 29 March 1952, at Brooklyn. All re-rated as *Escorteurs* in 1953.

**Gunnery Notes.**—The first group is being rearmed (secondary armament) with 6—40 mm. and 18—20 mm. *Marocain* already fitted.

Name	Builders	Launched	Completed
Algérien	Dravo Corporation, Wilmington, Del.	27 Nov., 1943	23 Jan., 1944
Arabe	Federal S.B. & D.D. Co.	3 Oct., 1943	4 Nov., 1943
Bambara	Federal S.B. & D.D. Co.	31 Oct., 1943	24 Nov., 1943
Berberé	Dravo Corporation, Wilmington, Del.		25 Jun., 1944
Hova	Dravo Corporation, Wilmington, Del.	22 Jan., 1944	18 Mar., 1944
Kabyle	Federal S.B. & D.D. Co.	17 Oct., 1943	17 Nov., 1943
Malgache	Federal S.B. & D.D. Co.	28 Nov., 1943	23 Dec., 1943
Marocain	Dravo Corporation, Wilmington, Del.	1 Jan., 1944	29 Feb., 1944
Sakalave	Federal S.B. & D.D. Co.	30 Dec., 1943	28 Jan., 1944
Sénégalais	Dravo Corporation, Wilmington, Del.	11 Nov., 1943	2 Jan., 1944
Somali	Dravo Corporation, Wilmington, Del.	12 Feb., 1944	9 Apr., 1944
Soudanais	Tampa S.B. Co.	10 Oct., 1943	15 Dec., 1942
Touareg	Western Pipe & Steel Co.	26 Sep., 1943	30 Jun., 1944
Tunisien	Dravo Corporation, Wilmington, Del.	17 Dec., 1943	11 Feb., 1944



HOVA

1953 Marius Bar.



TOUAREG

1953, Marius Bar.



ARABE

1953, Marius Bar, Toulon.

FRANCE—Escorts

Escorts (Rated as Avisos Escorteurs).

3 "Bisson" Type.



BISSON.

1952, Abrahams

BISSON

COMMANDANT AMYOT D'INVILLE

COMMANDANT DE PIMODAN

Displacement : 660 tons (930 tons full load)  
Dimensions : 257 x 28½ x 12 (max.) feet  
Guns : 1—4.1 inch, 2—40 mm. AA., 4—30 mm., 6 D.C.T. (Bisson, 2—3.5 inch aft, 1—40 mm.)  
Machinery : 2 sets Sulzer Diesels. 2 shafts. B.H.P. : 4,000 = 20 kts.  
Radius : 8,000 miles at 10 kts.  
Oil fuel : 82 tons  
Complement : 100

3 "Chevreuil" Type.



GAZELLE.

1950, French Navy, Official.

CHAMOIS (ex-Annamite)

CHEVREUIL

GAZELLE

Displacement : 647 tons standard (920 tons full load)  
Dimensions : 257 x 28½ x 10½ feet  
Guns : 2—3.5 inch (Chevreuil 1—4.1 inch), 1—40 mm., 6—20 mm.  
Machinery : Sulzer Diesels. 2 shafts. B.H.P. : 4,000 = 20 kts.  
Radius : 10,000 miles at 9 kts.  
Oil fuel : 100 tons  
Complement : 92

Notes.—Chevreuil and Gazelle built under 1935 programme, Chamois under that for 1937 ; remainder under 1938 programme. Formerly rated as Avisos de Deuxième Classe, but re-rated Escorteurs de Deuxième Classe in 1951 and as Avisos Escorteurs on 11 Aug. 1953. Both above and following class have amply demonstrated their qualities in both war and peacetime service on Indo-Chinese coasts, being robust, reliable and handy, and can be relied on indefinitely at sea. Annamite renamed Chamois in 1953.

Name	Builders	Laid down	Launched	Completed
Bisson	Lorient Dockyard	1939	5 Mar. 1946	Sep. 1947
Commandant Amyot D'inville	Ch. Dubigeon Penhoët	1939	13 May 1942	Dec. 1947
Commandant de Pimodan	A. C. Loire, St. Nazaire	1939	29 May 1942	Oct. 1947
Chamois	Lorient Dockyard	Apr. 1938	17 June 1939	Feb. 1940
Chevreuil	Lorient Dockyard	Apr. 1937	17 June 1939	Sep. 1939
Gazelle	Lorient Dockyard	Apr. 1937	17 June 1939	Oct. 1939

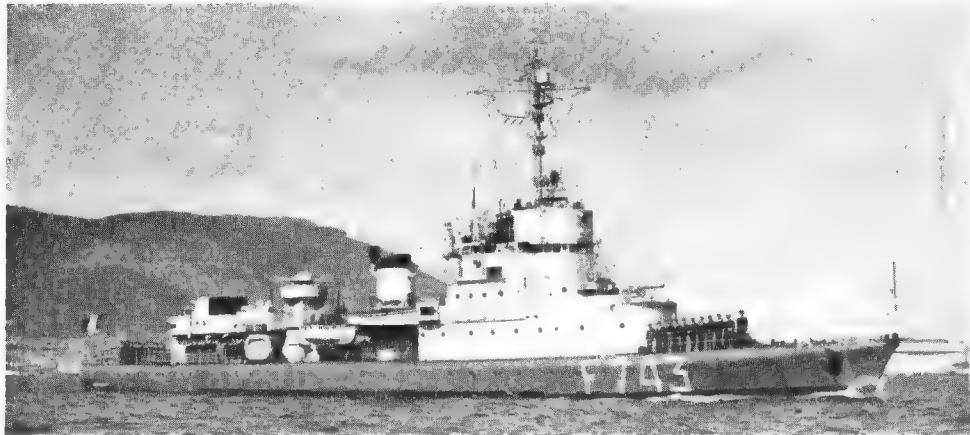
Escorts (Rated as Avisos Escorteurs).

8 "Élan" Class.



ÉLAN.

1953, Mr. A. Cemalettin Saracoglu.



COMMANDANT DUBOC

1952, Marius Bar.

COMMANDANT DELAGE  
COMMANDANT DOMINÉ

COMMANDANT DUBOC  
ÉLAN

LA BOUDEUSE  
LA CAPRICIEUSE

LA GRACIEUSE  
LA MOQUEUSE

Displacement : 640 tons standard (900 tons full load)  
Dimensions : 256 x 28 x 10½ feet  
Guns : 2—3.5 inch, 1—40 mm. AA., 6—20 mm. AA., 2 M.G., 4 D.C.T. (Commandant Dominé, La Capricieuse, Commandant Duboc and La Moqueuse each have 1—4.1 inch, AA., 1—40 mm. AA., 6 to 8—20 mm. AA. 1 to 8 D.C.T. Élan, 2—4 inch, 1—40 mm., 6—20 mm.)  
Machinery : 2 sets Sulzer Diesels. 2 shafts. B.H.P. : 4,000 = 20 kts.  
Oil fuel : 100 tons

Notes.—Élan built under 1934 Programme, Commandant Delage and Duboc under that for 1936 ; others, 1937. Formerly rated as Avisos de Deuxième Classe. Re-rated Escorteurs de Deuxième Classe in 1951, and as Avisos Escorteurs 11 Aug. 1953. Commandant Bory was scrapped in 1953.

Name	Builders	Laid down	Launched	Completed
Commandant Delage	At. et Ch. de France	Nov., 1936	25 Feb., 1939	Dec., 1939
Commandant Dominé	Ch. Dubigeon	Feb., 1938	2 May, 1939	Apr., 1940
Commandant Duboc	Ch. Dubigeon	Dec., 1936	16 Jan., 1939	Aug., 1939
Élan	Lorient Dockyard	Aug., 1936	27 Jul., 1938	Jan., 1939
La Boudeuse	At. et Ch. de France	Mar., 1938	Sep., 1939	Jan., 1940
La Capricieuse	Ch. Dubigeon	Jan., 1938	19 Apr., 1939	Feb., 1940
La Gracieuse	Ch. et At. de Provence	Feb., 1938	30 Nov., 1939	1940
La Moqueuse	Lorient Dockyard	Sep., 1938	25 Jan., 1940	Apr., 1940

Escorts (Rated as *Avisos Escorteurs*).

LA PÉROUSE.

Added 1952, French Navy, Official.

**BEAUTEMPS-BEAUPRE** (ex-Sans Souci)

Displacement : 1,372 tons (2,000 tons full load)  
 Dimensions : 311½ × 38½ × 10½ feet  
 Guns : 3—4.1 inch, 2—40 mm. AA., 6—20 mm. AA.  
 Machinery : Sulzer Diesels. Speed : 16 kts.  
 Complement : 144

**LA PÉROUSE** (ex-Sans Peur)

Notes.—Built by Penhoët. Both laid down in 1940, launched in 1941, and completed in 1946. Formerly rated as *Avisos Coloniaux Hydrographiques*. Re-rated as *Escorteurs de Deuxième Classe* (Frigates) early in 1953 and as *Avisos Escorteurs* 11 Aug. 1953, although they are still operated as surveying vessels (*Bâtiments Hydrographiques*).



AMIRAL MOUCHEZ

Built : Cherbourg  
 Laid down : Jan., 1935  
 Launched : 3 Aug., 1936  
 Displacement : 719 tons (970 tons full load)  
 Dimensions : 203½ × 33½ × 11 feet  
 Guns : 2—3.9 inch, 4—20 mm. (none at present)  
 Machinery : Sulzer Diesel. B.H.P. : 800 = 12 kts.  
 Complement : 91

Notes.—Formerly rated as *Aviso Hydrographique*. Re-rated *Escorteurs de Deuxième Classe* early in 1953, and as *Aviso Escorteurs* 11 Aug. 1953 but employed as survey ship.

Escorts (Rated as *Avisos Escorteurs*).Former Aircraft Tenders (*Dépanneurs d'Aviation*)

COMMANDANT ROBERT GIRAUD.

1954, courtesy M. Henri Le Masson.

**COMMANDANT ROBERT GIRAUD** (ex-German *Immelmann*)

Displacement : 1,000 tons (1,380 tons full load)  
 Dimensions : 239 (pp.), 246 (o.a.) × 36 × 12 feet  
 Guns : 1—4.1 inch, 2—40 mm. AA., 2—20 mm. AA.  
 Machinery : 4 M.A.N. Diesels. 2 shafts. B.H.P. : 8,800 = 20.5 kts. (23 kts. on trials)  
 Oil fuel : 236 tons  
 Complement : 77

**O.E. PAUL GOFFENY** (ex-German *Max Stinsky*)

Notes.—Former German aircraft tender. Built by Nordwerft, Hamburg. Completed 18 Dec. and 7 Aug., 1941, respectively. *Commandant Robert Giraud* is named after a gallant naval officer who lost his life when destroyer *Bison* was sunk, May 3, 1940. Re-rated as *Escorteurs de Deuxième Classe* early in 1953, and as *Avisos Escorteurs* 11 Aug. 1953.

**MARCEL LE BIHAN** (ex-German *Greif*)

Builders : Lubecken Flenderwerke  
 Launched : 1936  
 Completed : 1937  
 Displacement : 800 tons (1,000 tons full load)  
 Dimensions : 236½ × 34½ × 9 (light)  
 Guns : 1—4.1 inch, 4—20 mm. AA.  
 Machinery : 2 sets Diesels. B.H.P. : 4,400 = 18.5 kts.  
 Radius : 2,000 miles at 13 kts.

Notes.—Former German aircraft tender. Transferred by the United States in 1949. Re-rated as *Escorteurs de Deuxième Classe* early in 1953 and as *Aviso Escorteurs* 11 Aug. 1953. Resembles above two ships in general design. The above three ships have been used in Indo-China, where they have given yeoman service mainly as patrol and escort vessels, support gunboats, and as carriers for commandos, as they are fast, reliable, have rather shallow draught, a good armament and can stow LCV and LCVP aft.

3 Ex-U.S. Type (Rated as *Escorteurs*) Weather Ships.**LE BRIX** (ex-Manitowoc)**MERMOZ** (ex-Muskegon)**LE VERRIER** (ex-Emporia)

Displacement : 1,400 tons (2,260 tons full load)  
 Dimensions : 285½ (w.l.), 304 (o.a.) × 37½ × 13½ feet  
 Machinery : Triple expansion. 2 shafts. I.H.P. : 5,500 = 20 kts. (economical speed 12.5 kts.)  
 Boilers : 2, of 3-drum type  
 Complement : 88 peace

Notes.—Ex-U.S. frigates adapted for weather observation in N. Atlantic. Formerly rated as *Frégates Météorologiques*, but re-rated *Escorteurs de Deuxième Classe* in 1951. These ships officially belong to the Ministry of Transport and Public Works, and are not now manned by the French Navy. No armament but they would again be used as escort vessels in wartime.

Name	Builders	Laid Down	Launched	Completed
Le Brix	Globe, Superior	1942	30 Nov., 1943	1944
Mermoz	Walter Butler, Superior, Wisc.	1942	25 Jul., 1943	1943
Le Verrier	Walter Butler, Superior, Wisc.	1942	30 Aug., 1943	1944

FRANCE—Submarines

NEW CONSTRUCTION.

2 Patrol Type.

**ESPADON** Displacement : 1,200 tons **MORSE**  
Note.—Two submarines of the 1954 Programme will be allocated to private shipyards. Orders will be placed shortly.

4 Submarine Killers ("Arethuse" Class).

**AMAZONE** **ARETHUSE** **ARGONAUTE** **ARIANE**  
Displacement : 400 tons  
Tubes : 5  
Speed : 13 kts. surface, 16 kts. submerged  
Notes.—Two submarines of the SSK type for hunting other submarines are to be built under the 1953 programme, and two under the 1954 programme, all at Cherbourg. Streamlined hull, silent motors and up to date electronic and detection equipment.

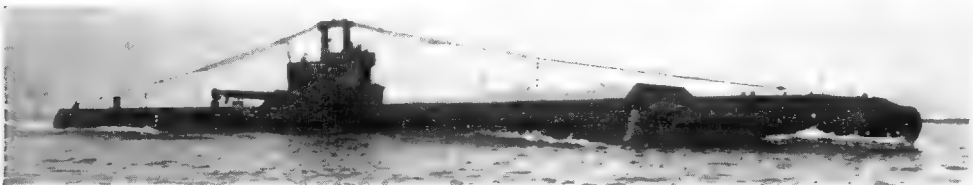
4 Oceangoing Type ("Narval" Class).

**DAUPHIN** **MARSOUIN** **NARVAL** **REQUIN**  
Displacement : 1,441 tons surface, 1,800 tons submerged  
Dimensions : 256 x — x — feet  
Tubes : 8  
Machinery : Schneider Diesels, B.H.P. : 4,000 = 16 kts. surface  
Electric motors, H.P. : 5,000 = 18 kts. submerged  
Notes.—Four new submarines have been authorised, two under 1949 Programme, two 1950. Improved revision of the German XXI type. All being built at Cherbourg in seven prefabricated parts each of 10 metres in length. To start trials in 1955.

3 Ex-British Type.



SULTANE. 1952, Marius Bar.



SIRENE 1953, Marius Bar.

<b>SAPHIR</b> (ex-Satyr)	<b>SIRENE</b> (ex-Spiteful)	<b>SULTANE</b> (ex-Statesman)
Displacement : 715 tons standard, 814 tons surface, 1,090 tons submerged		
Dimensions : 217 (o.a.) x 23½ x 10½ feet		
Tubes : 6—21 inch (bow), 13 torpedoes carried		
Machinery : B.H.P. : 1,900 = 14½ kts. surface ; H.P. : 1,300 = 12 kts. (Sirene 9 kts.) submerged		
Oil fuel : 44 tons		
Complement : 48		

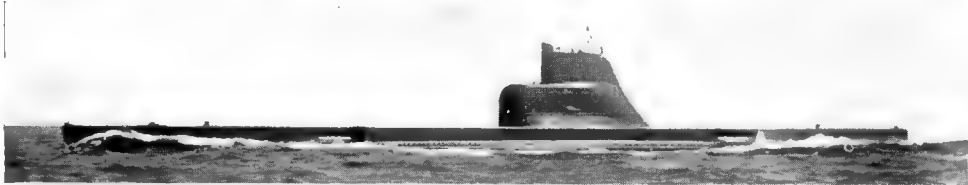
Notes.—Four of this class were transferred from British Navy to French Navy 1951-1952. Lent for 4 years for anti-submarine training Saphir and Sultane are streamlined. Sirene is fitted with snort. Sibylle (ex-Sportsman) was lost accidentally with all hands 23 Sep. 1952, near Toulon.

Name	Builders	Laid down	Launched	Completed
Saphir	Scotts' S.B. & Eng. Co., Ltd., Greenock	8 June 1940	28 Sep. 1942	8 Feb. 1943
Sirene	Scotts' S.B. & Eng. Co., Ltd., Greenock	19 Sep. 1941	5 June 1943	6 Oct. 1943
Sultane	Cammell, Laird & Co., Ltd., Birkenhead	2 Nov. 1942	14 Sep. 1943	13 Dec. 1943

5 Créole Class.



LA CRÉOLE. 1954, Marius Bar



ANDROMÈDE 1953, courtesy M. Henri Le Masson.



AFRICAINE 1953, A. & J. Pavia.



L'ASTRÉE. 1950, French Navy, Official.

<b>L'AFRICAINE</b>	<b>L'ANDROMÈDE</b>	<b>L'ARTEMIS</b>	<b>L'ASTRÉE</b>	<b>LA CRÉOLE</b>
Displacement : 820 tons standard, 910 tons surface, 1,170 tons submerged				
Dimensions : 241 x 21 x 11½ feet				
Guns : 1—3.5 inch (88 mm. ex-German), 2—20 mm. AA. (see notes)				
Tubes : 10—21.7 inch (6 internal)				
Machinery : Sulzer Diesels (Schneider in L'Africaire) B.H.P. : 3,000 = 17.3 kts. surface. Electric Motors H.P. : 1,400 (2,000 H.P. in L'Andromède) = 10 kts., submerged.				

Notes.—La Créole was towed to England after launch in 1940, and was returned to her builders in 1946 for completion. Construction of L'Africaire and L'Astrée was also resumed. L'Andromède and L'Artemis resumed under 1949 and 1950 Programmes, respectively, given streamlined superstructure, and snort, no guns. L'Andromède is armed with prototype equipment designed for the "Narval" class.

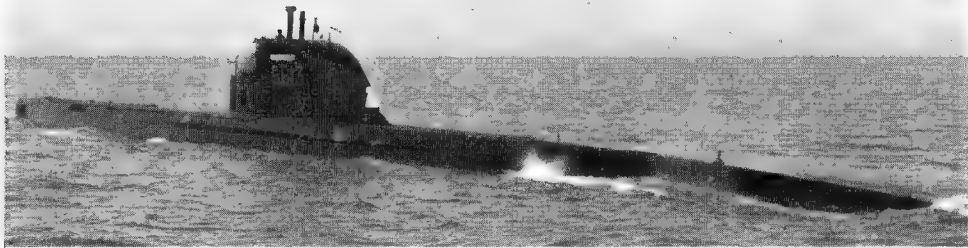
Name	Builders	Programme	Laid down	Launched	Completed
L'Africaire	Worms	1937	Sep., 1938	7 Dec., 1946	1948
L'Andromède	Dubigeon-Nantes	1938	1945	17 Nov., 1949	1953
L'Artemis	Normand	1938	1945	28 Jul., 1952	1953
L'Astrée	Dubigeon-Nantes	1938	1945	4 May, 1946	1949
La Créole	Normand	1937	Aug., 1938	5 Jun., 1940*	1946

\* Re-launched 3 May, 1946.



Submarines.

5 Ex-German Types.



ROLAND MORILLOT.

1954, courtesy M. Henri Le Masson

ROLAND MORILLOT (ex-U 2518)

Builders :	Blohm & Voss, Hamburg
Completed	1945
Displacement	1,330 tons (standard), 1,600 tons (surface), 1,827 tons (submerged)
Dimensions :	237 (pp.), 252½ (o.a.) × 21½ × 20½ feet
Tubes :	6—21 inch (23 torpedoes carried)
Machinery :	2 M.A.N. 6-cyl. Diesels. B.H.P. : 2,600 = 15 kts. ; 2 electric motors. H.P. : 5,000 = 16 kts
Oil fuel :	250 tons
Radius :	11,150 miles at 12 kts.
Complement :	51

Notes.—Former German oceangoing Type XXI. Transferred by Great Britain to French Navy.



LAUBIE.

1952, Marius Bar.

LAUBIE (ex-U 766)

MILLE (ex-U 471)

Displacement :	510 tons (designed), 750 tons (surface), 850 tons (submerged)
Dimensions :	220½ × 20½ × 15 feet
Tubes :	5—21 inch (14 torpedoes carried)
Machinery :	2 G.W. Diesels. B.H.P. : 2,800 = 17 kts. ; 2 Siemens electric motors. H.P. : 750 = 7.6 kts.
Oil fuel :	107 tons
Complement :	51

Notes.—Former German Type VII C. Both fitted with snort.

Name	Builders	Laid down	Launched	Completed
Laubie	Blohm & Voss, Hamburg	1942	Apr., 1943	Jul., 1943
Mille	Deutsche Werke, Kiel	1941	1942	1942

Ex-German Types—continued.



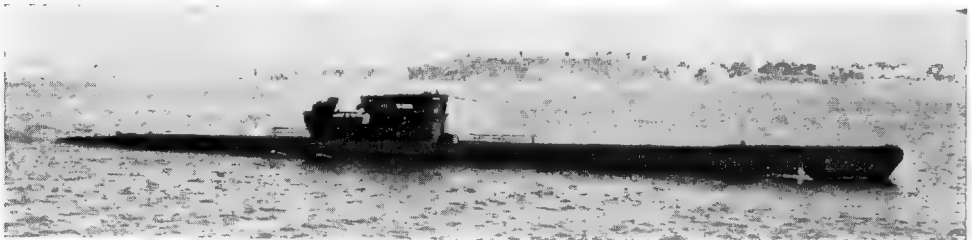
BOUAN

1953, Marius Bar.

BOUAN (ex-U 510)

Displacement :	740 tons (designed), 1,075 tons (surface), 1,360 tons (submerged)
Dimensions :	237 (pp.), 249½ (o.a.) × 22½ × 15½ feet
Tubes :	6—21 inch (16 torpedoes carried)
Machinery :	2 M.A.N. Diesels. B.H.P. : 4,400 = 18 kts. surface ; 2 Siemens electric motors. 2 shafts. H.P. : 1,000 = 7.3 kts. submerged.
Oil fuel :	208 tons
Complement :	50

Notes.—Former German Type IX C. Fitted with snort and a streamlined conning tower.



BLAISON (now has a streamlined conning tower).

1949, Emery.

BLAISON (ex-U 123)

Displacement	740 tons (designed), 1,000 tons (surface), 1,280 tons (submerged)
Dimensions :	237 (pp.), 249½ (o.a.) × 22½ × 15½ feet
Tubes :	6—21 inch (16 torpedoes carried)
Machinery :	2 M.A.N. Diesels. B.H.P. : 4,400 = 18 kts. surface ; 2 Siemens electric motors. H.P. : 1,000 = 7.3 kts. submerged.
Oil fuel :	174 tons
Complement :	50

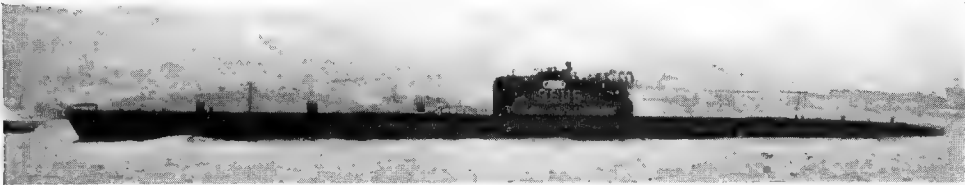
Note.—Former German Type IX B.

Name	Builders	Laid down	Launched	Completed
Blaison	Deschimag, Bremen	1939	1940	1940
Bouan	Blohm & Voss, Hamburg	1940	1940	1941

General Note.—Blaison, Bouan, Laubie and Mille are named after French submarine officers who lost their lives in the Second World War.

FRANCE—Submarines, Ocean Minesweepers

Submarines—continued.



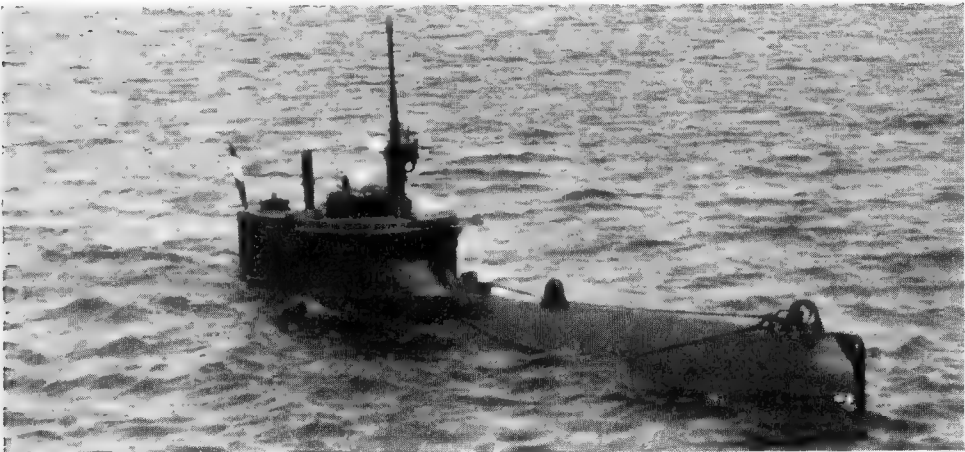
1953, Marius Bar.

JUNON

Builders :	Normand
Laid down :	1932
Launched :	15 Sep., 1935
Completed :	1936
Displacement :	597 tons standard, 670 tons surface, 858 tons submerged
Dimensions :	223½ × 22 × 13 feet
Guns :	1—20 mm. AA.
Tubes :	6—21.7 inch and 3—15.7 inch
Machinery :	2 sets Vickers-Normand Diesels. B.H.P. : 1,800 = 14 kts. surface). 2 Electric motors. H.P. : 1,200 = 9½ kts. (submerged)
Radius :	4,000 miles at 10 kts. (surface) ; 85 miles at 5 kts. (submerged)
Complement :	58

Notes.—Built under 1930 Programme. Sole survivor of a numerous Admiralé coastal type. Used for training and Asdic trials.

4 Midget Type.



1954, U.S. Navy, Official.

No. 621 (ex-74)	No. 622 (ex-90)	No. 623 (ex-107)	No. 624 (ex-365)
Displacement :	16 tons		
Dimensions :	39 × 6½ × 5½ feet		
Machinery :	1 Diesel, B.H.P. : 60 = 5 kts. 1 shaft. 1 electric motor, H.P. : 70 = 4 kts.		
Complement :	2		

Notes.—Ex-German Seehund type "pocket" submarines. Two 21 inch electric torpedoes carried.

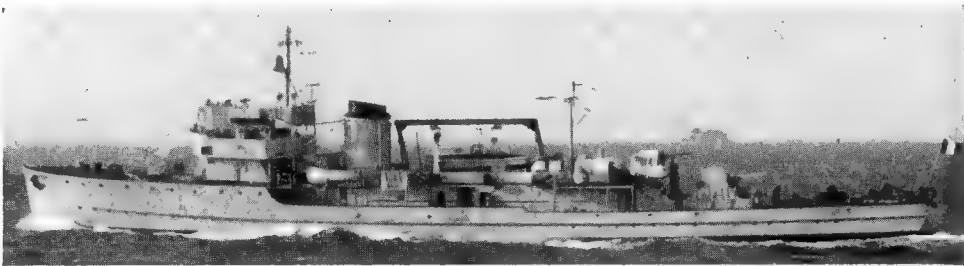
Ocean Minesweepers (Drageurs Oceaniques).

12 ex-U.S. AM Type (New Construction).

ALENÇON (ex-AM 453)	BERLAIMONT (ex-AM 500)	CANTHO (ex-AM 476)	ORIGNY (ex-AM 501)
AUTUN (ex-AM 502)	BERNEVAL (ex-AM 450)	DOMPAIRE (ex-AM 454)	MYTHO (ex-AM 475)
BACCARAT (ex-AM 505)	BIR HAKEIM (ex-AM 451)	GARIGLIANO (ex-AM 452)	VINH LONG (ex-AM 477)
Displacement :	700 tons standard, (750 tons full load)		
Dimensions :	194½ (o.a.) × 35 × 10 feet		
Guns :	1 or 2—3 inch, 4—20 mm. AA.		
Machinery :	2 Diesels. 2 shafts. B.H.P. : 1,600 = 13.5 kts.		
Radius :	11,000 miles at 10 kts.		
Complement :	74		

Notes.—The U.S.A. agreed in Sep. 1952, to transfer to France in 1953 eight new AM, and four more were transferred in 1954.

8 ex-German M 35 Type.



YSER.

1952, Abrahams.



SOMME.

1951, Skyfotos.

AILETTE (ex-M 24)	BELFORT (ex-M 205)	OISE (ex-M 38)	VIMY (ex-M 253)
ANCRE (ex-M 252)	LAFFAUX (ex-M 81)	SOMME (ex-M 9)	YSER (ex-M 85)
Displacement :	710 tons standard (800 tons full load)		
Dimensions :	228½ × 28½ × 9 feet		
Guns :	2—4.1 inch, 1—40 mm. AA., 4—20 mm. AA., (Ancre 1—4.1 inch, 2—20 mm.)		
Machinery :	Bersig-Berlin triple expansion. 2 shafts. I.H.P. : 3,200 = 18.5 kts.		
Boilers :	2 Wagner		
Oil fuel :	150 tons		
Radius of action :	2,100 miles at 10 kts.		
Complement :	100		

Notes.—Formerly rated as Avisos de Deuxième Classe until about 1950. Slight differences, especially in the boat handling and armament. Nearly identical. Originally carried 35 mines. Ailette is employed as fishery patrol vessel ; others are mostly attached to instructional establishments. Oise boat handling as in Ancre, built by Deutsche Werft, Hamburg, and employed as Pilotage training vessel. Belfort built by Neptun, Rostock, Vimy by Deutsche Werft, Hamburg. Belfort fitted as leader, has a very much higher foremast than others. Somme has a quite different type of davit for her power boat. Ancre has reduced armament. Marne and Suippe of ex-German M 40 type and Meuse of ex-German M 35 type, were discarded in 1953.

## Coastal Minesweepers

36 U.S. AMS Type New Construction.



COQUELICOT.

1954, Marius Bar.

ACACIA (ex-AMS 69, 28 Mar. 1953)  
 ACANTHE (ex-AMS 70)  
 ACONIT (ex-AMS 66, 27 Mar. 1953)  
 AJONC (ex-AMS 71)  
 AZALEA (ex-AMS 67, 9 June 1953)  
 BEGONIA (ex-AMS 83)  
 BLEUET (ex-AMS 116)  
 CAMELIA (ex-AMS 68)  
 CHRYSANTHEME (ex-AMS 113)  
 COQUELICOT (ex-AMS 74)  
 CYCLAMEN (ex-AMS 119)  
 EGLANTINE (ex-AMS 117)

GARDENIA (ex-AMS 114)  
 GIROFLEE (ex-AMS 85)  
 GLAIEUL (ex-AMS 120)  
 GLYCINE (ex-AMS 118)  
 JACINTHE (ex-AMS 115)  
 LAURIER (ex-AMS 86)  
 LILAS (ex-AMS 93)  
 LISERON (ex-AMS 98)  
 LOBELIA (ex-AMS 96)  
 MAGNOLIA (ex-AMS 87)  
 MARGUERITE (ex-AMS 94)  
 MIMOSA (ex-AMS 99)

MUGUET (ex-AMS 97)  
 MYOSOTIS (ex-AMS 123)  
 ALYSSE (ex-Narcisse, ex-AMS 95)  
 GELLET (ex-AMS 139)  
 PAQUERETTE (ex-AMS 140)  
 PAVOT (ex-AMS 124)  
 PERVENCHE (ex-AMS 141)  
 PIVOINE (ex-AMS 125)  
 RENONCULE (ex-AMS 142)  
 RESEDA (ex-AMS 126)  
 ROSELYS (ex-AMS 143)  
 TULIPE (ex-AMS 144)

Displacement : 370 tons standard (405 tons full load)  
 Dimensions : 136½ (pp.), 141 (o.a.) × 26 × 8½ feet  
 Guns : 4—20 mm. AA.  
 Machinery : 2 General Motors Diesels. 2 shafts. B.H.P. : 1,200 = 14 kts. (8 kts. when sweeping)  
 Oil fuel : 40 tons  
 Radius : 1,500 miles at 10 kts.  
 Complement : 38

Notes.—The U.S.A. agreed in Sept. 1952, to transfer to France in 1953 the above 36 new AMS (of the same general particulars as the *Aldebaran* class, see right). Auxiliary motor minesweepers of wooden construction. New type of vessel constructed throughout of materials with the lowest possible magnetic attraction to attain the greatest possible safety factor when sweeping for magnetic mines. All "Flower" names, some of which had been given to the corvettes under the Free French flag : *Aconit* (which sank two submarines), *Lobelia*, *Mimosa*, *Roselys*. Two, *Glycine* and *Myosotis*, perpetuate the names of ex-YMS of the U.S.A. which were mined and sunk in Indo-China.

6 Canadian Type. New Construction.

LA BAYONNAISE (ex-Chignecto)  
 LA DIEPPOISE

LA DUNKERQUOISE (ex-Fundy)  
 LA LORIENTAISE

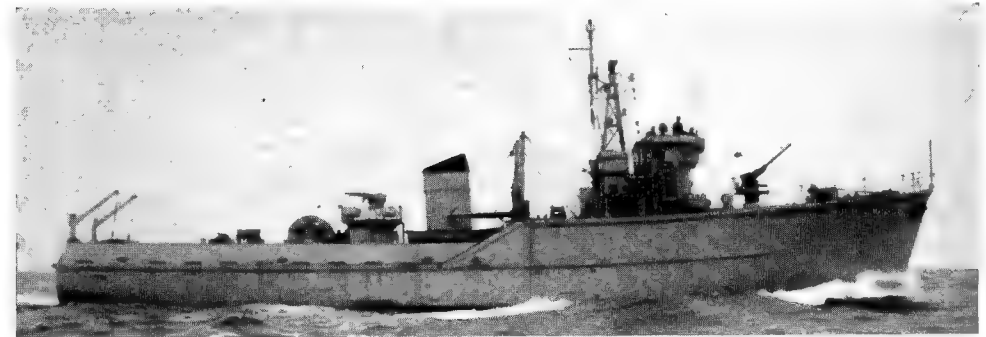
LA MALOQUINE (ex-Cowichan)  
 LA PAIMPOLAISE (ex-Thunder)

Displacement : 370 tons  
 Dimensions : 151 (pp.), 164 (o.a.) × 30½ × 9½ feet  
 Guns : 1—40 mm.  
 Machinery : General Motors Diesels. B.H.P. : 2,500 = 16 kts. (max.)

Notes.—Hoisted the French flag at Halifax 1 April, 1954.

Coastal Minesweepers (*Dragueurs Côtiers*).

37 New Construction.



VEGA

1954, courtesy M. Henri Masson.

ACHERNAR  
 ALDEBARAN (27 June 1953)  
 ALGOL (15 Apr. 1953)  
 ALTAIR  
 ANTARES (21 Jan. 1953)  
 ARCTURUS (12 Mar. 1954)

BETELGEUSE  
 CAPRICORNE  
 CASSIOPEE (16 Nov. 1953)  
 CASTOR (19 Nov. 1953)  
 CROIX DU SUD

ERIDAN (18 May 1954)  
 ETOILE POLAIRE  
 ORION (20 Nov. 1953)  
 POLLUX  
 PROCYON

REGULUS (18 Nov. 1952)  
 RIGEL (13 May 1953)  
 SAGITTAIRE  
 SIRIUS (6 Oct. 1952)  
 VEGA (14 Jan. 1953)

D 18	D 22	D 26	D 30
D 19	D 23	D 27	D 31
D 20	D 24	D 28	D 32
D 21	D 25	D 29	D 33

Displacement : 365 tons (424 tons full load)  
 Dimensions : 140 (pp.), 152 (o.a.) × 28 × 8½ feet  
 Guns : 1—40 mm. Bofors AA., 1—20 mm. Oerlikon AA.  
 Machinery : Sigma free piston generator and Alsthom or Rateau-Bretagne gas turbines.  
 2 shafts. B.H.P. : 2,000 = 15 kts. (11.5 kts. when sweeping)  
 Oil fuel : 48 tons  
 Radius : 3,000 miles at 15 kts.  
 Complement : 38

Notes.—Built to British specifications. Of wooden and aluminium alloy construction. Will be propelled by a special new type of engine i.e., Alsthom gas turbine with Sigma free piston generator, except *Arcturus* and *Betelgeuse* which have Pillstick light diesels. Similar to those being built in United States, Great Britain, Canada and the Netherlands of which the plans are similar for all. The original design of this type of craft was developed in close collaboration with John I. Thornycroft & Co. Ltd., Southampton and the British Admiralty. D 18 to D 33 built under "off-shore" procurement programme. Launch dates as above.

## Inshore Minesweepers

4 New Construction

Notes.—Four "in-shore" minesweepers of a new type are provided for under the 1953 programme. Building allocated to Penhoët.

9 Converted Ex-Patrol (*Chasseur*) Type.

CH 690 (ex-CH 101, ex-SC 524)  
 CH 691 (ex-CH 102, ex-SC 525)  
 CH 695 (ex-CH 141, ex-SC 770)

CH 696 (ex-CH 142, ex-SC 498)  
 CH 697 (ex-CH 146, ex-SC 979)  
 CH 711 (ex-CH 125, ex-SC 1043)

CH 713 (ex-CH 131, ex-SC 692)  
 CH 714 (ex-CH 132, ex-SC 691)  
 CH 715 (ex-CH 144, ex-SC 655)

Notes.—Ex-U.S. chasers (see Patrol Launches, Page 217) now rated as dragueurs de rade et d'estuaire (inshore minesweepers) but used mainly as danlayers though most are fitted with Oropesa equipment.

## 214

## Patrol Vessels

### 2 Ex-American Type.

#### LOTUS (ex-D 324, ex-YMS 43)

Displacement : 232 tons (270 tons full load)  
 Dimensions : 134½ × 24½ × 12 feet  
 Guns : 1—3 inch, d.p., 2—20 mm. AA., 2 M.G.  
 Machinery : Diesels. 2 shafts. B.H.P. : 1,000 = 15 kts.  
 Oil fuel 16 tons

#### TIARÉ (ex-D 353, ex-YMS 63)

Notes.—Built of wood. Acquired from United States in 1944. Formerly rated as minesweepers. Re-rated as patrol vessels in 1951. Same type as ex-American minesweepers of "Amarante" class on preceding page. Stationed at Tahiti and Caledonia.

## Submarine Depot Ship.

(Ravitailleur-pour-Sousmarins).



GUSTAVE ZÉDÉ

1953, Marius Bar

#### GUSTAVE ZÉDÉ (ex-Saar)

Builders : Krupp-Germania  
 Launched : 5 Apr., 1934  
 Displacement : 2,895 tons  
 Dimensions : 308 × 44½ × 14 feet  
 Guns : 3—4.1 inch, 4—40 mm. AA., 8—20 mm. AA.  
 Machinery : 2 sets Krupp Diesels. 2 shafts. B.H.P. : 3,700 = 16 kts.  
 Fuel : 336 tons  
 Radius : 3,400 miles at 11 kts.  
 Complement : 364

Notes.—Former German submarine school depot ship. Acquired from U.S. Navy in October, 1947. Recommissioned in 1949. Alterations to bridge and foremast 1952 (see photo). Flagship of the G.A.S.M. or Groupe d'action anti-sousmarine (Anti-submarine Group).

## Port Depot Ships.

General Notes.—Former cruisers, etc., now classed as depot ships.

There are the obsolete heavy cruisers *Suffren*, at Toulon, *Duquesne* at Arzew, and *Tourville* at Brest (for reserve midshipmen's training) and the light cruiser *Emile Bertin* at Toulon, all used as barracks; the former aircraft carrier *Béarn*, hulk at Toulon, and the late battleship *Paris*, now floating headquarters of Brest flotillas. *Zefee* is the station ship at Papeete, Tahiti.

## Fleet Repair Ships.

(Navires Atelier).



JULES VERNE

1950, Marius Bar

#### JULES VERNE

Builders : Lorient  
 Launched : 3 Feb., 1931

Displacement : 4,347 tons (6,340 tons full load)  
 Dimensions : 377½ (pp.), 400½ (o.a.) × 56½ × 19 feet  
 Guns : 4—3.5 inch AA., 7—40 mm. AA., 10—20 mm. AA.  
 Machinery : 2 sets Sulzer Diesels. 2 shafts. B.H.P. : 7,000 = 16 kts.  
 Complement : 296

Note.—Previously served as submarine depot ship.



VULCAIN

1953, Marius Bar

#### VULCAIN (ex-U.S.S. Agenor, ARL 3, ex-LST 490)

Launched : 1942

Displacement : 1,625 tons (light) 4,050 tons (full load)  
 Dimensions : 328 (o.a.) × 50 × 14½ (max.) feet  
 Machinery : 2 Diesels. B.H.P. : 1,700 = 10.8 kts.

Notes.—Former United States ocean tank carrier with bow doors. Transferred in 1951 for service in Indo-China.



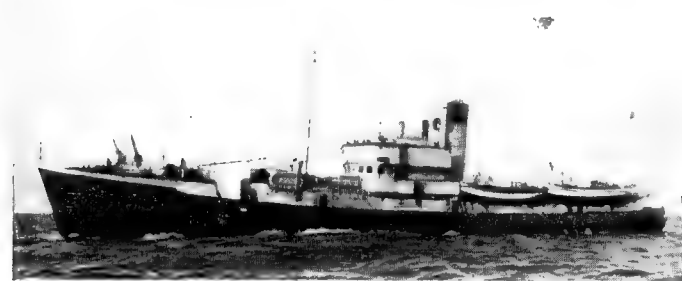
FRANCE—Surveying Vessels, Trawlers, Patrol Boats

Surveying Vessels.

I Ex-American Type.

**INGENIEUR EN CHEF GIROD** (ex-FS 24, ex-Governor Wright)  
Displacement : 950 tons  
Dimensions : 176 × 32½ × 10½ feet  
Machinery : 2 General Motors diesels. 1 shaft. B.H.P. : 1,000 = 12 kts.  
Complement : 55

5 Ex-German Type.



INGENIEUR-HYDROGRAPHE NICOLAS 1949, Official.

**INGENIEUR-HYDROGRAPHE NICOLAS** (ex-Otto Brohan, ex-B 206)  
Builders : C.N.F., Caen  
Launched : 1944  
Displacement : 800 tons (1,080 tons full load)  
Dimensions : 176 × 28½ × 16½ feet  
Guns : 2—20 mm. AA.  
Machinery : Triple expansion. 1 shaft. Speed : 10 kts.  
Coal : 190 tons  
Complement : 68

Notes.—Formerly German. Reconstructed as surveying vessel.



ALIDADE. 1947, M. Henri Le Masson.

**ALIDADE** (ex-German M 4621, ex-Van Rozeland)  
Displacement : 700 tons standard (995 tons full load)  
Dimensions : 184½ × 26½ × 16½ feet  
Guns : 1—3.5 inch, 2—20 mm.  
Machinery : Triple expansion with exhaust turbine. Coal.  
Speed : 11.5 kts.  
Complement : 46

Surveying Vessels—continued.



OCTANT 1947, M. Henri Le Masson.

**OCTANT** (ex-German M 4626, ex-Ostfriesland)  
Displacement : 800 tons standard (1,100 tons full load)  
Dimensions : 183½ × 26½ × 17 feet  
Guns : 1—3.5 inch, 2—20 mm.  
Machinery : Triple expansion with exhaust turbine. Speed : 10 kts.  
Coal : 210 tons  
Complement : 50

Notes.—Astralabe (ex-B 281, ex-V201, ex-Zieten) and Boussole (ex-UJ 1405, ex-B 285) were scrapped in 1953.



SENTINELLE. 1951, Skyfotos.

**ESTAFETTE** (ex-B 282, ex-Treff. 6) **SENTINELLE** (ex-B 284, ex-Treff. 2)  
Displacement : 500 tons standard (654 tons full load)  
Dimensions : 137 × 26 × 15½ feet  
Guns : 2—20 mm.  
Machinery : Dentz motor. B.H.P. : 500 = 12 kts.  
Oil fuel : 140 tons

Note.—Both ex-whalers.

General Note for Surveying Vessels.—Usually commissioned for the six months April-November, and reduced to Reserve during other six months of the year.

Trawlers (Chalutiers, rated as Patrouilleurs).



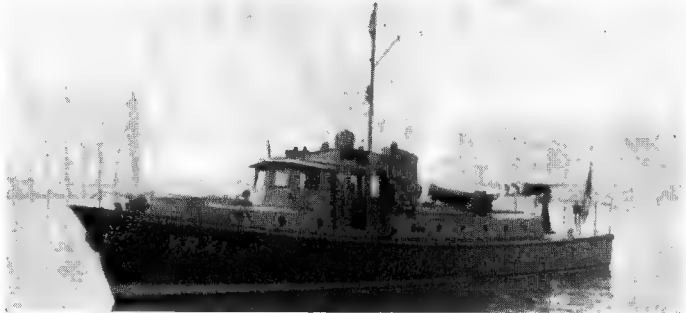
LA SETOISE 1953, Marius Bar.

**L'AJACCIENE** (ex-Mildenhall)  
**LA SETOISE** (ex-Oriental Star)  
Displacement : 590 to 640 tons (900 tons full load)  
Dimensions : 178½ × 27½ × 16½ feet  
Guns : 1—4 inch, 1—40 mm., 5—20 mm. AA., 2 M.G.  
Machinery : 1 H.P. 800 = 10 kts.  
Coal : 205 tons  
Complement : 35

Notes.—L'Ajaccienne launched 1936, others 1934. Slight differences in appearance. All acquired from Great Britain early in 1940.

Rhine Patrol Boats (Flotilla du Rhin).

New Construction : 18 motor launches, a river monitor, two tugs and 25 other craft are being built in Germany for the Rhine Flotilla.



**VR 9796** (ex-41) **VR 9797** (ex-42) **VR 9798** (ex-43) **VR 9799** (ex-44)  
Displacement : 23 tons  
Dimensions : 65½ × 11½ × 6½ feet  
Guns : 1—20 mm. AA., 1—13.2 mm. Hotchkiss M.G.  
Machinery : 2 M.A.N. Diesels. 2 shafts. B.H.P. : 250 = 18 kts.  
Complement : 8

Notes.—Built 1950-51, two by Rasmussen, Bremse Vegesack, two by Immenstadt (Lake Constance).

**LES VOSGES** (ex-Washington, ex-Brunehilde)  
Displacement : 500 tons light  
Dimensions : 251½ (o.a.) × 32½ × 4½ feet  
Machinery : 2 Diesels. B.H.P. : 400  
Complement : 143

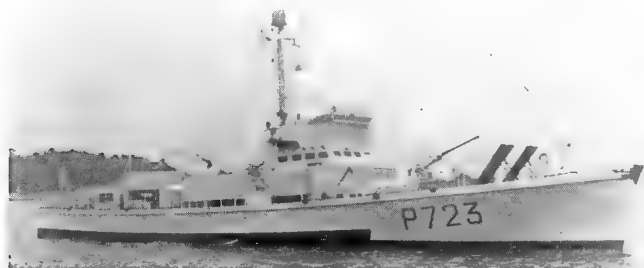
Notes.—Purchased 1953. Former U.S. patrol vessel on Danube, dismantled for transfer to Rhine and rebuilt there with additional section. Flagship of Rhine Flotilla and tender for light craft.

**AMIRAL EXELMANS** (ex-Germania)  
Notes.—Ex-river passenger boat purchased in 1952. Used for the training of pilots.

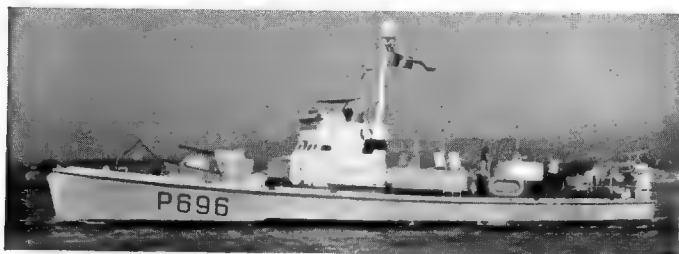
## Patrol Launches.

23 Wooden Type.

(Formerly rated as *Chasseurs de Sousmarins*).



P 723 (showing quadruple rocket launchers) 1954, courtesy M. Henri Le Masson.



P 696 1953, Marius Bar.

P 692 (ex-CH 136, ex-SC 1030)  
P 693 (ex-CH 104, ex-SC 533)  
P 694 (ex-CH 121, ex-SC 515)  
P 699 (ex-CH 62, ex-SC 1344)  
P 700 (ex-CH 71, ex-SC 1337)  
P 701 (ex-CH 92, ex-SC 697)  
P 702 (ex-CH 94, ex-SC 977)  
P 703 (ex-CH 95, ex-SC 508)  
P 704 (ex-CH 5, ex-SC 1359)

P 705 (ex-CH 135, ex-SC 651)  
P 709 (ex-CH 122, ex-SC 534)  
P 716 (ex-CH 51, ex-SC 1336)  
P 717 (ex-CH 52, ex-SC 1335)  
P 718 (ex-CH 81, ex-SC 516)  
P 720 (ex-CH 83, ex-SC 519)  
P 722 (ex-CH 91, ex-SC 649)  
P 723 (ex-CH 93, ex-SC 639)  
P 724 (ex-CH 96, ex-SC 497)

P 731 (ex-GC 2, ex-SC 1008)  
P 732 (ex-GC 3, ex-SC —)  
P 733 (ex-GC 4, ex-SC 1025)

P 735 (ex-GC 6, ex-SC 1034)  
P 736 (ex-GC 7, ex-SC 1020)

Displacement : 95 tons (138 tons full load)  
Dimensions : 107½ (w.l.), 110½ (o.a.) × 17 × 6½ feet  
Guns : 1—40 mm. AA., 3—20 mm. AA. (P 731 to 736, 2—20 mm. and 2 M.G. only). Numerous D.C.  
Machinery : 2 G.M. Diesels. 2 shafts. B.H.P. : 800 = 15 kts.  
Complement : 25

Notes.—Wood. P 692 launched 26 Aug. 1942, P 694, 20 Sep. 1942, P 700, 19 July 1943, P 704, 3 Apr. 1943, P 717, 5 June 1943, P 718, 11 Oct. 1941, P 722, 18 Apr. 1942, P 694, 20 Sep. 1942. Acquired from U.S.N. in 1944 except last five, ex-U.S. submarine chasers, transferred from the U.S.A. in 1951 for Indo-China, which are lighter with more streamlined bridge and have something of the appearance of U.S. Coast Guard patrol vessels. Formerly rated as Submarine Chasers, but re-rated Patrol Vessels in 1951. CH 116 (ex-SC 638) mined and sunk Aug. 21, 1945, P 698 (ex-CH 61, ex-SC 1345) and P 730, (ex-CH 72, ex-SC 1346) discarded 1952. P 707 (ex-CH 106, ex-SC 690), P 708 (ex-CH 107 ex-SC 693), P 710, (ex-CH 123, ex-SC 1029), P 712 (ex-CH 134, ex-SC 666), P 719 (ex-CH 82 ex-SC 517), P 721 (ex-CH 84, ex-SC 529), P 725 (ex-CH 114, ex-SC 526), P 726 (ex-CH 133, ex-SC 695), P 727 (ex-CH 143, ex-SC 535), and P 734 (ex-GC 5, ex-SC) all scrapped 1953. P 690, 691, 695, 696, 697, 711, 713, 714, 715 now rated as inshore minesweepers (see earlier page).

## Patrol Launches—continued.

Seaplane Tender Type.

(Rated as *Patrouilleurs*).



CH 21. 1952, courtesy M. Henri Le Masson.

P 705 CH 02 (ex-CH 21) Displacement : 107 tons (135 tons full load)  
Dimensions : 121½ × 16½ × 6½ feet  
Guns : 1—3 inch, etc. (P 705 has 1—3 inch, 4—20 mm. AA.)  
Machinery : M.A.N. Diesels. 2 shafts. B.H.P. : 1,100 = 16 kts.

Notes.—Ordered under 1937 Programme. Steel. Built by F. de la Méditerranée and Worms respectively. Above craft were specially designed for employment as seaplane tenders when required. Both launched 1940. Rated as *Patrouilleurs*.

## Seaward Defence Motor Launches.

(*Vedettes de Port*).

27 British Type.

VP 747 (ex-HDML 1423)  
VP 748 (ex-HDML 1228)  
VP 749 (ex-HDML 1229)  
\*VP 750 (ex-VP 1, ex-HDML 1249)  
\*VP 751 (ex-VP 10, ex-HDML 1250)  
\*VP 752 (ex-VP 11, ex-HDML 1152)  
\*VP 753 (ex-VP 13, ex-HDML 1142)  
\*VP 754 (ex-VP 14, ex-HDML 1136)  
\*VP 755 (ex-VP 15, ex-HDML 1144)  
\*VP 756 (ex-VP 21, ex-HDML 1072)  
\*VP 757 (ex-VP 22, ex-HDML 1141)  
\*VP 758 (ex-VP 23, ex-HDML 1231)  
\*VP 759 (ex-VP 31, ex-HDML 1143)  
\*VP 760 (ex-VP 32, ex-HDML 1164)

Displacement : 40 tons standard (52 tons full load)  
Dimensions : 72 (o.a.) × 15½ × 4½ (mean) feet  
Guns : 1—20 mm., 4 M.G. (VP 759, 760, 1—2 pdr., 1—20 mm. AA.)  
Machinery : Diesel. 2 shafts. B.H.P. : 260 = 11 kts.

Notes.—\*On loan from Royal Navy. P 759, 760 were known during war as *Palmyre* and *Baalbeck*, respectively. VP 61 and 63 were sunk during a hurricane, March 14, 1948. VP 72 discarded 1951. Most of these boats are in Indo-China. VP 769 (ex-VP 3, ex-HDML 1233) and VP 770 (ex-VP 12, ex-HDML 1225) stricken from the Navy List 1953.

## 2 American Type.

P 772 (ex-VP 51)

Displacement : 40 tons

Notes.—Ex-ML, U.S. Navy. Stationed in Tahiti.

\*VP 761 (ex-VP 41, ex-HDML 1425)  
VP 762 (ex-VP 42, ex-HDML 1457)  
VP 763 (ex-VP 71, ex-HDML 1377)  
VP 764 (ex-VP 24, ex-HDML 1067)  
VP 765 (ex-VP 81, ex-HDML 1432)  
\*VP 766 (ex-VP 9, ex-HDML 1127)  
\*VP 767 (ex-VP 16, ex-HDML 1139)  
\*VP 768 (ex-VP 6, ex-HDML 1228)  
\*VP 771 (ex-VP 8, ex-HDML 1232)  
VP 775 (ex-VP 25, ex-HDML 1021)  
VP 776 (ex-VP 26, ex-HDML 1022)  
VP 777 (ex-VP 27, ex-HDML 1269)  
VP 778 (ex-VP 28, ex-HDML 1274)

P 773 (ex-VP 52)

## Motor Torpedo Boats.



VLT 2 1953, courtesy M. Henri Le Masson.

VLT 780 (ex-VLT 1, ex-S 307)

Displacement : 94 tons full load  
Dimensions : 98½ × 19½ × 6½ feet  
Guns : 2—40 mm., 2—20 mm.  
Torpedoes : 2—21 inch  
Machinery : 6 motors, 2 shafts. B.H.P. : 6,600 = 40 kts.  
Complement : 18

Note.—VLT 2 condemned in 1953.

## Air-Sea Rescue Launches.

(*Vedettes de Sauvetage Aero Maritime*).

V 612 (ex-140) V 615 (ex-147) V 617 (ex-144) V 619 (ex-146)  
V 616 (ex-143)

Displacement : 30 tons  
Guns : 6 M.G.  
Machinery : 3 shafts. B.H.P. : 1,500 = 27 kts.  
Radius : 360 miles at 18 kts.

Notes.—Former British air-sea rescue launches. Launched 1944-45. V 613 (ex-141) and V 618 (ex-145) discarded 1953.

V 621 (ex-V 120, ex-S 301)

V 622 (ex-V 121, ex-S 302)

Displacement : 65 tons  
Dimensions : 99½ × 19 × 5½ feet  
Guns : 12 M.G.  
Machinery : B.H.P. : 3,600 = 35 kts.

Notes.—Built at Meulan. German type like following. V 611 (ex-131, ex-522) discarded 1953.

V 620

Displacement : 30 tons  
Length : 93 feet (o.a.)  
Guns : 7 M.G.  
Machinery : Diesel. B.H.P. : 2,600 = 39 kts.  
Complement : 11

V 782 (ex-MAS 543)

Displacement : 26 tons  
Guns : 4—20 mm.  
Speed : 34 kts.

Notes.—Italian type. Built in C.R.D.A., Monfalcone, Yard in 1941-1943.

FRANCE—Amphibious Vessels, Boom Defence Vessels, etc.

Landing Ships.

(Rated as *Bâtiments de débarquement*).

Note.—The 1949 programme authorised some landing ships of 350 tons.



ODET.

1954, courtesy M. Henri Le Masson.

**CHÉLIFF** (ex-LST 874)  
**GOLO** (ex-LST 973)  
**LAÏTA** (ex-LST 177, May 10, 1943)

Displacement : 1,625 tons (4,080 tons full load)  
Dimensions : 316 (w.l.), 328 × 50 × 14 (max.) feet  
Guns : 8—20 mm. AA.  
Machinery : Diesel, 2 shafts. B.H.P. : 1,700 = 11 kts.

Note.—Golo (ex-U.S.S. LST 973) transferred from U.S.A. to France, Nov. 1951 at San Diego, California. Used as naval transports. Adour (ex-LST 860), seriously damaged, was raised and is now as accommodation ship at Saigon.



LSIL 9035

1952, courtesy M. H. Le Masson.

**ARBALETE** (ex-LSSL 9021, ex-1, ex-U.S. 2) **JAVELINE** (ex-LSSL 9024, ex-4, ex-U.S. 10)  
**ARQUEBUSE** (ex-LSSL 9022, ex-2 ex-4) **PERTUISANE** (ex-LSSL 9025, ex-5, ex-28)  
**HALLEBARDE** (ex-LSSL 9023, ex-3, ex-9) **RAPIERE** (ex-LSSL 9026, ex-6, ex-U.S. 80)

Displacement : 227 tons (383 tons full load)  
Dimensions : 158 × 23½ × 5½ feet  
Guns : 1—3 inch, 4—40 mm., 4—20 mm.  
Machinery : Diesel, 2 shafts. B.H.P. : 1,600 = 14.4 kts.

Notes.—First six Landing Ships Support (Large) were transferred from U.S.A. in 1951 for service in Indo-China, two in Jan. 1954. Heavier armament emphasises fire power.

**LSIL 9029** (ex-698) **LSIL 9032** (ex-1092) **LSIL 9036** (ex-710)  
**LSIL 9030** (ex-715) **LSIL 9033** (ex-871) **LSIL 9037** (ex-768)  
**LSIL 9031** (ex-818) **LSIL 9034** (ex-699) **LSIL 9038** (ex-872)  
**LSIL 9035** (ex-702) **LSIL 9039** (ex-875)

Notes.—Stationed in Indo-China. Ex-U.S. ships 9030-9033 ceded to France at Bremerton, Washington, 2 Mar. 1951., 9029 and 9034-39 in 1953. Similar to preceding class.

Landing Ships—continued.

**LSM 9011** (ex-U.S.S. 355) **LSM 9015** (ex-U.S.S. 422) **LSM 9019** (ex-U.S.S. 226)  
**LSM 9012** (ex-U.S.S. 110) **LSM 9016** (ex-U.S.S. 478) **LSM 9051** (ex-U.S.S. 85)  
**LSM 9013** (ex-U.S.S. 125) **LSM 9017** (ex-U.S.S. 17) **LSM 9052** (ex-U.S.S. 471)  
**LSM 9014** (ex-U.S.S. 316) **LSM 9018** (ex-U.S.S. 58)

Notes.—Landing Ships Medium designed primarily to carry assault troops. Widely employed in beach landings during Second World War. Transferred to the French Navy for use in Indo-China Jan. 1954. Last two may be in new Viet Nam Navy.

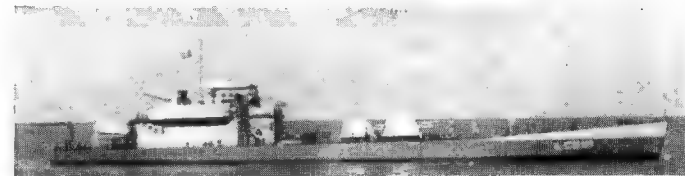
Landing Craft.

**LCI 9040** (ex-101) **LCI 9045** (ex-201) **LCI 9048** (ex-260)  
**LCI 9042** (ex-103) **LCI 9046** (ex-217) **LCI 9049** (ex-263)  
**LCI 9043** (ex-108) **LCI 9047** (ex-251)

Note.—Infantry Landing Craft transferred from the United States under the Mutual Defense Assistance Programme for use in Indo-China. LCI 9041 (ex-102) and LCI 9044 (ex-109) discarded 1953, LCI 9050 (ex-508) in 1954.

**LCH 9055** (ex-LCH 377, ex-LCI 377)

Note.—In Algeria.



LCG 9059.

1954, courtesy M. Henri Le Masson.

**LCG 9059** (ex-LGC 111)  
Note.—In Indo-China.

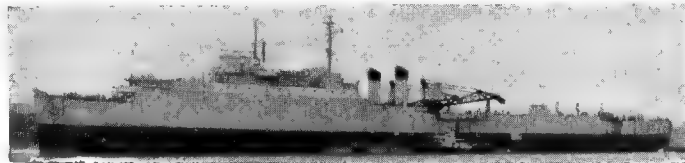
**LCT 9060** (ex-1104) **LCT 9067** (ex-1276) **LCT 9081** (ex-718)  
**LCT 9061** (ex-1126) **LCT 9068** (ex-1311) **LCT 9082** (ex-1127)  
**LCT 9062** (ex-1139) **LCT 9069** (ex-1313) **LCT 9085** (ex-622)  
**LCT 9063** (ex-1156) **LCT 9070** (ex-1329) **LCT 9086** (ex-1221)  
**LCT 9064** (ex-1157) **LCT 9071** (ex-1348) **LCT 9091** (ex-720)  
**LCT 9065** (ex-1187) **LCT 9072** (ex-7016) **LCT 9092** (ex-799)  
**LCT 9066** (ex-1257) **LCT 9080** (ex-766) **LCT 9093** (ex-834)

Notes.—LCT 9080 at Brest, LCT 9081, 9082 at Arzew, Algeria, remainder in Indo-China.

**LCT 9083** (ex-LCT(R) 4) **LCT 9084** (ex-LCT(R) 27)

Notes.—Arzew, Algeria. Saint Pabu, ex-LCT used as harbour barge after removal of engines.

Landing Ship Dock.



FOUDRE

1953, Marius Bar.

**FOUDRE** (ex-Greek Okeanos, ex-British Oceanway, ex-U.S. LSD 12)

Builders : Newport News S.B. & D.D. Co.  
Launched : 29 Dec. 1943  
Displacement : 4,500 tons standard (7,930 tons full load)  
Dimensions : 457½ (o.a.) × 72 × 18 feet  
Machinery : Turbine 2 shafts. H.P. : 7,400 = 17 kts.

Notes.—Transferred by U.S. to Great Britain in 1944. Acquired by Greece from whom purchased by U.S. in 1952 and transferred to France under MDAP.

Landing Ship Monitors.

Notes.—All LSIL, LSSL, LSM and LCT on operations in Indo-China are practically converted into gunboats with additional mortars (army pattern) and plating to protect them. Landing ships and landing craft have been in many cases considerably altered and turned into armoured vessels with shields, reinforced armament (military guns added to U.S. armament). Hence the so-called LCM "monitors" or "armoured LCMs."

Boom Defence Vessels.

(Rated as *Gabares*.)

6 New Construction AN Type.

**CIGALE** (ex-AN 98) **FOURMI** (ex-AN 97) **SCARABEE** (ex-AN 94)  
**CRICQUET** (ex-AN 96) **GRILLON** (ex-AN 95) **G 6**

Displacement : 400 tons  
Dimensions : 146½ × 33½ × 10½ feet  
Guns : 1—40 mm. Bofors, 4—20 mm. AA.  
Machinery : 2 4-stroke diesels. B.H.P. : 800 = 12 kts.

Notes.—"Off-shore" orders. Only the five with names have been finally allocated to the French Navy. G 6 is unnamed. Cricquet launched 3 June, 1954.



ARAIGNÉE.

1954, courtesy M. Henri Le Masson.

**ARAIGNÉE** (ex-Hackberry, ex-Maple)

**SCORPION** (ex-Yew)

**TARENTULE** (ex-Pepperwood, ex-Walnut)

Displacement : 560 tons (850 tons full load)  
Dimensions : 146 (w.l.), 163 (o.a.) × 30½ × 11½ feet  
Guns : 1—3 inch AA., some M.G.  
Machinery : Diesel-electric. H.P. : 800 = 12 kts.  
Complement : 39

Note.—Launched 6 Mar., Sep., 25 Aug., 1941, respectively.

**AGISSANTE**

**GIRAFE**

**PERSÉVÉRANTE**

**PUISSANTE**

**FIDÈLE**

**PATIENTE**

**PERSISTANTE**

**VICTORIEUSE**

Diving Tender (*Batiment de Recherches Sous Marines*).

**INGÉNIEUR ÉLIE MONNIER** (ex-German trawler Albatros)

Displacement : 280 tons standard (350 tons full load)  
Dimensions : 111½ × 24 × 10 feet  
Machinery : Diesel, 1 shaft. Speed : 12 kts.  
Range : 1,500 miles  
Complement : 19

Notes.—Fitted for ocean research. Built by D. W. Kremer Schiffwerft Elmshorn 1944.

## Oilers (Transports Petroliers).



CHARENTE.

1946, French Navy, Official.

### LA BAISE

Displacement :  
Dimensions :  
Guns :  
Machinery :  
Boilers :  
Oil fuel :  
Radius :

### LA CHARENTE

4,220 tons (12,100 tons deadweight)  
433 × 52½ × 20½ feet  
1—3.9 inch, 14—20 mm. AA.  
Parsons geared turbines. 2 shafts. S.H.P. : 5,200 = 15 kts.  
2 Penhoët  
1,100 tons  
10,000 miles at 13 kts.

### LA MAYENNE

Notes.—Built by Ch. Worms, Le Trait, under 1938 Programme. Rated as Ravitailleurs d'Escadre. Baise launched 1945, Charente in 1940.



LAC TONLE-SAP.

Added, 1949, Emery.

### LAC CHAMBON (ex-Anticline)

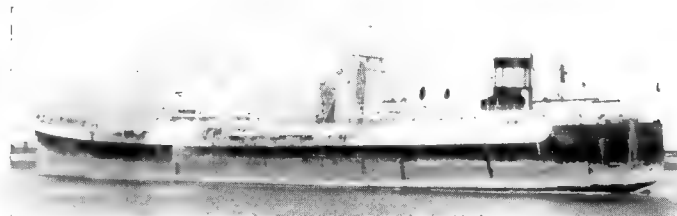
### LAC TCHAD (ex-Syncline)

Displacement : 800 tons (2,670 tons full load)  
Guns : 3—20 mm. AA.  
Machinery : Diesel. B.H.P. : 1,150 = 11 kts.

### LAC TONLE-SAP (ex-Pumper)

Notes.—Ex-American fuel oil barges, Acquired Dec. 1944-March 1945. Lac Noir scrapped 1951 Lac Pavin scrapped 1953.

## Oilers—continued.



LA SEINE.

1954, Official.

### LA SAONE

Displacement : 5,147 tons (16,870 tons full load)  
Dimensions : 525 × 72½ × 33 feet  
Machinery : 2 Parsons geared turbines. 2 shafts. S.H.P. : 7,200 = 16 kts.  
Boilers : 3 Penhoët

### LA SEINE

Notes.—Fleet tankers returned to French Navy from charter company Sep. 1953. Funnel is now painted all black.

### L'AULNE (ex-U.S. YOG 680)

Displacement : 450 tons  
Capacity : 700 tons deadweight

Note.—Ex-U.S. oiler ceded to France 2 Mar., 1950. Rated as petrol transport.

### ELORN

### VAR

Notes.—Both built by Deutsche Werft A.G., Hamburg, on War Reparations account. Launched 1930 and 1931 respectively. Particulars similar to Le Mékong, below.



LE MÉKONG.

Added 1944, Marius Bar.

### LE MÉKONG

Builders : Penhoët, St. Nazaire  
Launched : 31 Aug., 1928  
Displacement : 5,482 tons standard (15,150 tons full load)  
Dimensions : 436½ (pp.), 456 (o.a.) × 61½ × 26 (mean) feet  
Guns : 2—3.9 inch, 2—1 pdr.  
Machinery : 2 sets Burmeister & Wain Diesel engines. B.H.P. 4,850 = 13.5 kts. (6,000 on trials)

Complement : 81 peace, 104 war

Notes.—Capacity of tanks : 33,900 cubic metres. Deadweight : 9,600 tons, of which oil fuel absorbs 9,000 ; distilled water, 500 ; lubricating oil, 100.

### GARONNE (ex-Italian Tarvisio)

Built : Castellammare  
Launched : 11 Apr., 1927  
Displacement : 10,915 tons  
Dimensions : 372½ × 59 × 22½ feet  
Guns : 4—4.7 inch, 2—3 inch AA.  
Machinery : Parsons geared turbines. S.H.P. : 2,600 = 10 kts.  
Boilers : 3 cylindrical, oil-fired  
Cargo capacity : 8,000 tons

Notes.—Rated as Citerne automotrice de rade. Hulk at Toulon.

## Oilers and Transports—FRANCE

## Transports.



1947; courtesy M. Henri Le Masson.

### ILE D'OLERON (ex-München, ex-Mur)

Launched : 1939  
Displacement : 3,300 tons  
Dimensions : 350 × 50 × — feet  
Machinery : M.A.N. Diesel. B.H.P. : 3,500 = 14.5 kts.  
Complement : 110

Notes.—Now an accommodation vessel at Brest (reserve midshipmen's training establishment with ex-cruiser Tourville.)

### HERAULT (ex-Tirso, ex-Italian Sprugola)

Builders : C. Tirreno, Riva Trigoso  
Launched : 1937

Displacement : 1,086 tons  
Dimensions : 174 × 33 × 11½ feet  
Guns : 4 M.G.  
Machinery : Fiat Diesels. B.H.P. : 600 = 9.5 kts.

Notes.—Transferred from Italy. Fitted for minelaying.

### ALPHÉE (ex-yacht)

Displacement : 900 tons (1,280 tons full load)  
Machinery : 2 M.A.N. Diesels. 2 shafts. B.H.P. : 1,700 = 14 kts.



LIAMONE.

1954, courtesy M. Henri Le Masson.

### GIBOULÉE

Displacement : 575 tons (1,369 tons full load)  
Dimensions : 184 × 28½ × 13½ feet  
Machinery : Sulzer Diesels. B.H.P. : 1,000 = 11.5 kts.  
Complement : 27

Note.—Arrosoir was renamed Liamone in March 1954.

### FALLERON (ex-German Welle)

Displacement : 150 tons (247 tons full load)  
Machinery : Diesels. Speed : 7 kts.

### HANAP (ex-Stjordels Fjord)

### LIAMONE (ex-Arrosoir)

### TER (ex-German Heinrich)

FRANCE—Transports, Training Ships, Fleet Tugs, etc.

Transports—continued.



GAPEAU. 1952, Marius Bar.

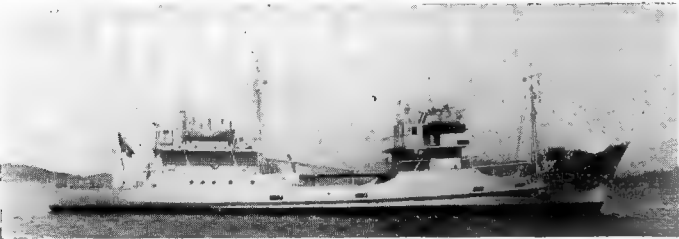
**GAPEAU** (ex-German B 284, ex-V 625, ex-Johan Schultz)  
**MOLÈNE** (ex-German B 262, ex-V 620, ex-Köln)  
Displacement: 300 tons  
Machinery: Deutz Diesels. B.H.P. 500 = 9 kts.

**CAP FERRAT**  
Displacement: 300 tons  
Machinery: Reciprocating, 1 shaft. H.P. 300

**P 675 RACHGOUN** (ex-B 253) **P 671 TRÉBÉRON** (ex-B 254)  
Displacement: 120 tons  
Dimensions: 82 x 20 x 9 feet  
Machinery: Diesel. B.H.P. : 120 = 8.5 kts.

Note.—Former German danlayers used as small personnel transports for local service. Rated as Patrol Craft.

Water Carriers and Coastal Tankers.



SAHEL. 1954, courtesy M. Henri Le Masson.

**OASIS** **RUMMEL** **SAHEL**  
Displacement: 1,430 tons full load  
Machinery: 2 Diesels. B.H.P. : 700 = 12 kts.

Note.—Sahel completed Aug. 1951, Rummel and Oasis in 1952 and 1953 respectively, by Chantiers Naval de Caen. Deadweight 600 tons.

**CASCADE** (ex-Italian Anapo) **SOURCE** (ex-Italian Bisagno)  
Built: Ceruta-Volpi  
Launched: 1933  
Displacement: 182 tons  
Machinery: S.M. Diesel. B.H.P. : 180 = 8 kts.

**AIGUADE** **CASAMANCE** **FRAICHE** **OASIS**  
**ARROYO** **CATARACTE** **GOBELET** **ONDEE**  
**AVERSE** **DELUGE** **JOUVENCE** **RUISSEAU**  
**BRUINE** **FONTAINE** **MIRAGE** **TORRENT**  
**ZAGHOUAN**

Armoured River Barge.

**TONNERRE** (ex-Foudre)  
Note.—Armoured river barge stationed in Indo-China.

M.F.V.s

**MFV 601** (ex-1009) **MFV 603** (ex-1116)

Training Ships (Voiliers-École.)

NOTRE DAME D'ETEL

Note.—Attached to the School of Manoeuvres.

LA BELLE-POULE

Displacement: 227 tons  
Dimensions: 128 (o.a.) x 23½ x 11½ feet  
Machinery: Sulzer Diesel. B.H.P. : 120 = 6 kts.

L'ÉTOILE

Notes.—Built by Chantiers de Normandie (Fécamp), 1932. Accommodation for 3 officers, 30 cadets, 5 petty officers, 12 seamen. Attached to the Navy School.

MUTIN

Note.—Attached to the School of Pilotage.

Fleet Tugs.

BÉLIER

Displacement: 1,185 and 1,115 tons respectively  
Machinery: I.H.P. : 3,000 = 12 kts.  
Oil fuel: 180 tons  
Radius: 3,000 miles

PACHYDERME

BUFFLE

Builders: A. & C. de Bretagne  
Laid down: 1936  
Launched: 4 May, 1939

Displacement: 1,180 tons  
Dimensions: 167½ x 33 x — feet  
Machinery: 2 sets triple expansion. I.H.P. : 2,000 = 12 kts.  
Complement: 32

ACHARNÉ  
ACTIF  
APPLIQUÉ

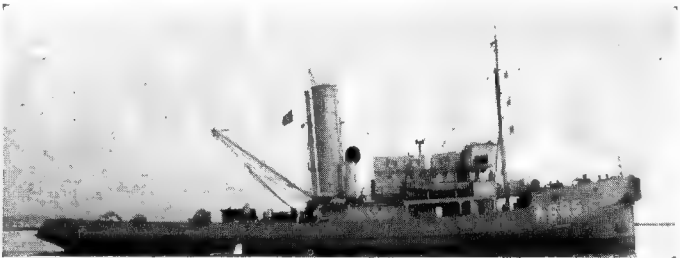
Displacement: 600 to 682 tons full load  
Dimensions: 114½ x 27½ x — feet  
Machinery: Triple expansion. I.H.P. : 1,000 = 10 to 11 kts.

CÉPÉT  
CHAMPION

COTENTIN  
ENTÊTE

OBSTINÉ  
TÊTU  
UTILE

Notes.—All laid down 1937-38, Actif by Ch. de la Loire, Nantes, Cépét and Cotentin by Ch. Dubigeon, Nantes, Acharné by Brest, others by F. & C. de la Gironde, Bordeaux.



FORT. 1954, courtesy M. Henri Le Masson.

FORT (1933)

Displacement: 610 tons  
Machinery: I.H.P. : 1,100 = 10 kts.

INFATIGABLE (ex-Polangen)

Displacement: 540 tons  
Machinery: I.H.P. : 1,200 and 1,600 respectively

IMPLACABLE (ex-Fohn II)

VALEUREUX (ex-ATA, 1930)

Displacement: 662 tons full load  
Machinery: I.H.P. : 1,000 = 10 kts.

Fleet Tugs—continued.

IMBATTABLE (ex-Nesserland)

Displacement: 690 tons  
Machinery: I.H.P. : 1,000 = 10 kts.

INTRAITABLE (ex-Nordergrunde)

MAMMOUTH (1918)

Displacement: 620 tons  
Machinery: I.H.P. : 1,800 = 10 kts.

ÉLÉPHANT (ex-Bär)

Displacement: 1,180 tons full load  
Machinery: I.H.P. : 1,800 = 12 kts

HUELGOAT (ex-Tegeler Platte)

Displacement: 690 tons  
Machinery: I.H.P. : 1,000 = 10 kts.

SAMSON (ex-German Suder Hever)

Displacement: 690 tons  
Machinery: I.H.P. : 1,000 = 11 kts.

SÉRIEUX (ex-Italian Nereo)

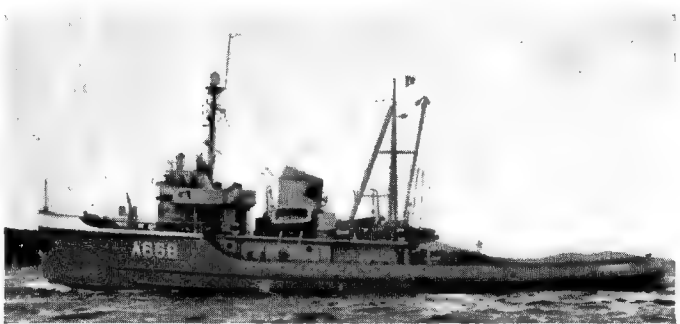
Displacement: 340 tons full load  
Machinery: I.H.P. : 900 = 11 kts.

TOURTERELLE

Displacement: 790 tons  
Machinery: I.H.P. : 850 = 11 kts.

EFFICACE

Displacement: 465 tons  
Machinery: I.H.P. : 1,000 = 9 kts.



RHINOCÉROS. 1953, Marius Bar.

RHINOCÉROS (ex-American ATA 226)

Displacement: 800 tons  
Machinery: Diesels. B.H.P. : 1,800 = 12 kts

COOLIE (ex-YTB 459, ex-Edenshaw, 1943)

Displacement: 300 tons  
Machinery: Diesel. B.H.P. : 1,020 = 14 kts.

MALABAR (ex-YTB 458, ex-Evea)

Displacement: 300 tons  
Machinery: Diesels. B.H.P. : 1,020 = 15 kts.

Note.—Transferred from U.S. Navy, 1944.

TENACE (ex-Hermes)

Displacement: 400 tons  
Machinery: Diesels. B.H.P. : 1,600 = 10 kts.

LOCMINÉ



# GERMANY (EAST)

## Escort Vessel.

**ERNST THALMANN** (ex-Dorsch, ex-Hvidbjørnen)  
Displacement : 1,050 tons (2,000 tons approx. full load)  
Machinery : Speed : 14 kts.  
Notes.—Reported launched 1952, but existence uncertain. Ex-Danish Hvidbjørnen.

## Patrol Vessels. (Minelayers).

**FÜRSTENBERG** **PRENZLAU** (ex-Henrik Scruer)  
Displacement : 1,200 tons  
Guns : 2—3 inch, 4—37 mm. AA., 4—20 mm. AA.  
Note.—Under conversion.

## Patrol Boat. Coastal Type.

Displacement: 400 tons  
Guns : 2—3.5 inch AA., 1—45 mm. AA., 20—20 mm. AA.  
Note.—Existence reported, but doubtful.

## Gunboat. (Anti-Aircraft Ship).

Ex-UJ 113  
Displacement : 1,400 tons  
Guns : 1—4.1 inch, 2—3.5 inch, 20—20 mm. AA.  
Note.—Details not confirmed.

## River Gunboat.

Displacement : 1,000 tons  
Note.—Existence uncertain. No really reliable information available.

## Torpedo Boats. New Construction

Note.—Twelve torpedo boats reported to be included in new programme.

## Minesweepers.

### New Construction.

Displacement : 500 tons  
Machinery : Diesel  
Notes.—Six new minesweepers reported to be under construction. Similar to M 40 type but with diesel propulsion.

### M 35 Type.

Displacement : 700 tons (900 tons full load)  
Dimensions : 229½ × 27½ × 7½ feet  
Guns : 2—4.1 inch, 1—37 mm. AA., 8—20 mm. AA.  
Machinery : Triple expansion. 2 shafts. I.H.P. : 3,500 = 18.3 kts.  
Boilers : 2 Wagner  
Fuel : 125 tons oil  
Radius : 2,000 miles at 16 kts.  
Complement : 100  
Notes.—1st Minesweeping Flotilla of the former German Navy delivered to the Russian Navy as reparations at the end of the Second World War. Reported handed over to the East German Government to provide the nucleus of a People's Government Navy. These vessels are mostly or all in the Black Sea.

### M 40 Type.

Displacement : 551 tons (784 tons full load)  
Dimensions : 203½ × 273 × 8½ feet  
Guns : 1—4.1 inch, 1—37 mm. AA., 10—20 mm. AA.  
Machinery : Triple expansion. 2 shafts. I.H.P. : 2,150 = 16.7 kts.  
Boilers : 2  
Fuel : 142 tons coal  
Radius : 2,400 miles at 10 kts.  
Complement : 80  
Notes.—Former German coal-burning minesweepers awarded to Russian Navy as war reparations, but returned to East Germany at end of 1951 (see above). Number uncertain.

## Coastal Minesweepers.

### 13 Motor Minesweeping Boat Type.

Note.—Thirteen reported to have been launched in 1951.

### 6 Inshore Type.

Displacement: 120 tons  
Guns : 4—20 mm.

## Surveying Vessels.

**JOH. L. KRUGER**  
Note.—One or two reported.

## Motor Torpedo Boats. New Construction.

Note.—Some 24 motor torpedo boats are reported to be in the new construction programme.

### 20 Long Type.

Displacement : 70 tons  
Note.—Twenty of these boats reported but not confirmed.

### 12 Fast Type.

Note.—Reported to be of PT type.

## Motor Launches. 10 R-boat Type.

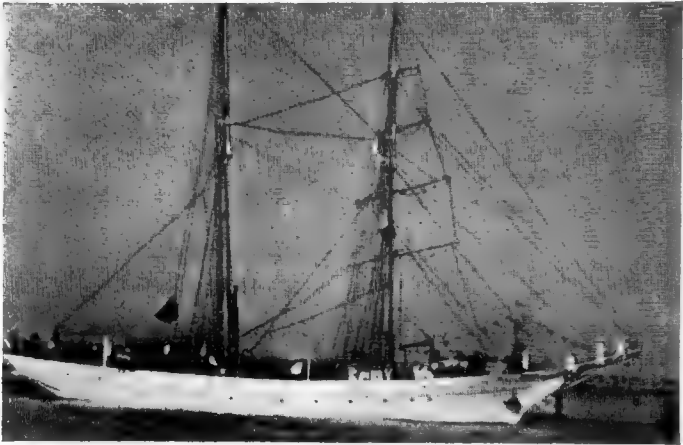
Displacement: 100 to 125 tons  
Speed : 20 kts.  
Note.—Reported to be of minesweeping boat type. Built 1943.

### 28 Picket Type.

111	112	113	114	115	116
Displacement : 50 tons					
Dimensions : 92 (pp.), 99 (o.a.) × 13½ × 5½ feet					
Speed : 25 kts.					

Note.—Reported planned for coastguard and minelaying duties.

## Training Ship.



WILHELM PIECK.

1953, courtesy Herr Alexander Bradt.

WILHELM PIECK

Note.—Two-masted schooner employed as a school ship.

GERMANY (WEST)—Patrol Boats

Patrol Boats.

(Ministry of the Interior)

3 S-Boote Type.

S 1	S 2	S 3
Displacement :	110 tons	
Dimensions :	115 x 16½ x 6 feet	
Guns :	2—20 mm. AA., 2 M.G.	
Machinery :	3 Diesel Motors. B.H.P. : 7,500 = 38 kts.	
Radius :	600 miles	
Complement :	19	

Notes.—Building by Lürssen, Vegesack, 1951-53. Not yet completed.

4 P Type.



P 1. 1953, courtesy Herr Alexander Bredt.



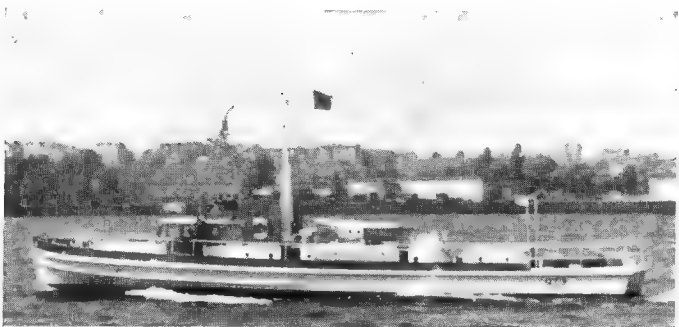
P 2. 1953, courtesy Herr Alexander Bredt.

P 1	P 2	P 3	P 4
Displacement :	45 tons (60 tons full load)		
Dimensions :	83 (p.p.), 95 (o.a.) x 16 x 5 feet		
Guns :	2—20 mm. AA., 2 M.G.		
Machinery :	2 Diesel Motors. B.H.P. : 2,000 = 25 kts.		
Complement :	16		

Notes.—Built 1951-52. Similar to U.S. Coast Guard 83-ft. type.

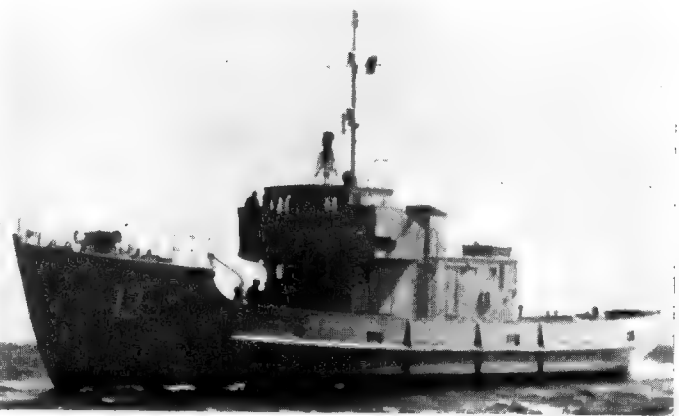
GERMANY (WEST)

Patrol Boats—continued.



FALKE. 1954, courtesy Herr Alexander Bredt.

6 “W” Type.



W 12. 1954, courtesy Herr Alexander Bredt.

W 7	W 8	W 9	W 10	W 11	W 12
Displacement :	circa 200 tons				
Dimensions :	118 x 22 x 11 feet				
Guns :	1—20 mm. AA.				
Machinery :	1 Fairbanks-Morse Diesel Motor. B.H.P. : 450 (W 7-11); 1 National Diesel Motor. B.H.P. : 500 (W 12) = 11 kts.				
Complement :	18				

Notes.—Fishing cutters formerly employed as coastal minesweepers in the German Navy and laid up in several German ports under Allied control until returned to the German Government. Ex-Canadian built MMS II. Some fitted with high fo'c's'le. These vessels were Belgian fishing vessels before being bought and rebuilt by Germany.

Patrol Boats—continued.



W 15. 1954, courtesy Herr Alexander Bredt.



W 13-16. 1953, courtesy Herr Alexander Bredt.

W 1	W 13	W 15	W 17
W 2	W 14	W 16	W 18
W 3			W 19
Displacement :	112 tons		
Dimensions :	78½ x 22 x 9 feet		
Guns :	1—20 mm. AA., 2 M.G.		
Machinery :	1 Diesel Motor. B.H.P. : 150 = 9 kts.		
Radius :	1,200 miles		
Complement :	16		

Notes.—KFK (Kriegsfischkutter), type picket boats (wachboote), see notes at bottom of Column 2.

## Minesweepers.

(U.S. Advanced Base, Bremerhaven)

**M 201** (ex-M 294)      **M 202** (ex-M 278, ex-TS 4)      **M 204** (ex-M 460)  
**M 203** (ex-M 388, ex-TS 7)      **M 205** (ex-M 441)

Displacement : 551 tons (784 tons full load)  
Dimensions :  $203\frac{1}{2} \times 28 \times 8\frac{1}{2}$  feet  
Guns : 1—20 mm. AA.  
Machinery : 2 shafts. H.P. : 2,150 = 16.7 kts.  
Boilers : 2  
Complement : 76

**M 206** (ex-M 611, ex-Wangerooze)

Displacement : 600 tons (813 tons full load)  
Dimensions :  $223 \times 29\frac{1}{2} \times 7\frac{1}{2}$  feet  
Guns : 1—20 mm. AA.  
Machinery : 2 shafts. H.P. : 2,600 = 17.3 kts.  
Boilers : 2  
Complement : 107

## Coastal Minesweepers.

26 "R" "Type"

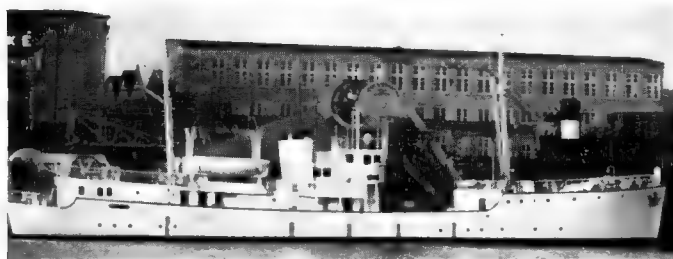
**R 132**      **R 135**      **R 138**      **R 144**  
**R 133**      **R 136**      **R 140**      **R 146**  
**R 134**      **R 137**      **R 142**      **R 147**

Displacement : 155 tons  
Dimensions :  $135 \times 19 \times 5\frac{1}{2}$  feet  
Guns : 1—20 mm. AA.  
Machinery : Diesel, B.H.P. : 2,200 = 19 kts.

Note.—There are about 14 more vessels of this type.

## Transports. (Ex-Minesweepers).

2 "Isles" Type.



EIDER.

1954, courtesy Herr Alexander Bredt.

**EIDER**

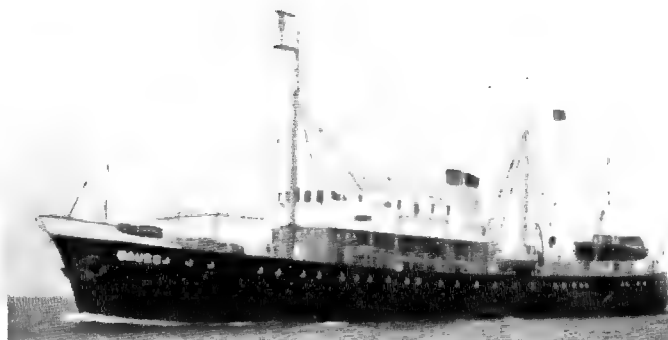
**TRARE**

Displacement : 560 tons (770 tons full load)  
Dimensions :  $164$  (o.a.)  $\times 27\frac{1}{2} \times 14$  feet  
Machinery : Diesels = 12 kts.  
Fuel : 183 tons

Notes.—Former British "Isles" type minesweepers (trawlers). Converted from steam (triple expansion) to diesel propulsion.

## Surveying Vessels.

(Ministry of Traffic)



1953, courtesy Herr Alexander Bredt.

**GAUSS**

Measurement : 846 tons gross  
Speed : 12 kts.  
Complement : 40

**HOOGE**

Displacement : 169 tons  
Speed : 10 kts.  
Complement : 13

**RUDEN**

**ATAIR**

Displacement : 110 tons.  
Speed : 8 kts.  
Complement : 12

**RUNGHOLT**

**WEGA**

## Tenders.

**BORKUM**      **HARLE**      **INDIA**      **KNURRAHN**

## Tugs.

**PASSAT**      **PELLWORM**      **PUDDEFJORD**

## Fishery Protection Vessels

(Ministry of Foods)

**MEERKATZE**

Measurement : 673 tons gross  
Dimensions :  $187 \times 28\frac{1}{2} \times 15\frac{1}{2}$  feet  
Machinery : Diesel Motor. B.H.P. : 1,000 = 12 kts.  
Complement : 26

## Minesweepers, etc.—GERMANY (WEST)

### Fishery Protection Vessels—continued.



1953, courtesy Herr Alexander Bredt.

**FRITHJOF**

Measurement : 242 tons gross  
Dimensions :  $121\frac{1}{2} \times 23 \times 13$  feet  
Machinery : 1 shaft. I.H.P. : 400 = 10 kts.

## Training Ship.



NORDWIND.

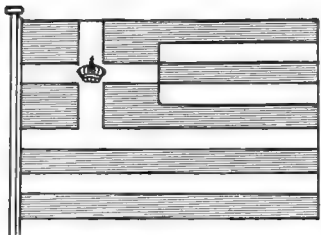
1954, courtesy Herr Alexander Bredt

**NORDWIND**

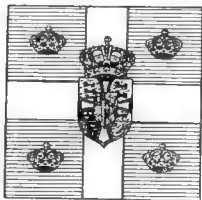
Notes.—Ketch, ex-Kriegsfischkutter. Sail area: 2037½ sq. ft.

# ROYAL HELLENIC NAVY

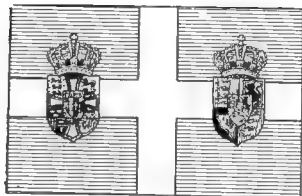
## Flags.



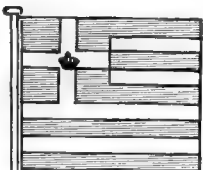
ENSIGN



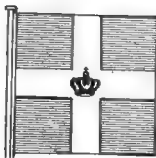
KING'S STANDARD



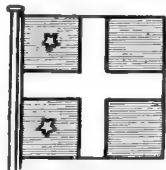
QUEEN'S STANDARD



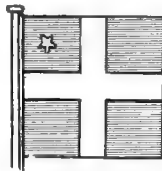
MINISTER OF MARINE



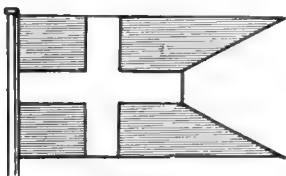
JACK



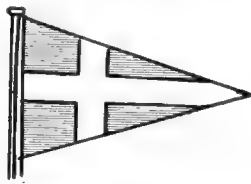
VICE-ADMIRAL



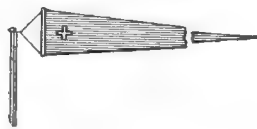
REAR-ADMIRAL



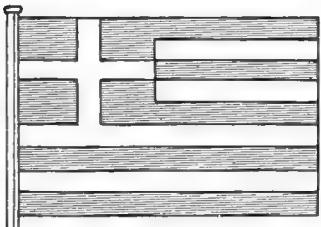
COMMODORE



CAPTAIN (D)



PENDANT



MERCANTILE



KING'S PENDANT.



NAVY BLUE

YELLOW

RED

## Uniforms.



- |   |  |                                     |  |                             |                                   |
|---|--|-------------------------------------|--|-----------------------------|-----------------------------------|
| 1) Arkhinavarkhos<br>Admiral of the Fleet | (2) Navarkhos.<br>Admiral.                                       | (3) Antinavarkhos.<br>Vice-Admiral. | (4) Yponavarkhos.<br>Rear-Admiral.       | (5) Ploiarkhos.<br>Captain. | (6) Antiploiarkhos.<br>Commander. |
|   | (7) Plotarkhis.<br>Lieutenant-<br>Commander<br>(with brass hat). | (8) Ypoploiarkhos.<br>Lieutenant.   | (9) Antipoploiarkhos.<br>Sub-Lieutenant. | (10) Simæphoros.<br>Ensign. |                                   |

Note.—Rank of Admiral of the Fleet, with thick band and 4 stripes, is held only by the King.

Other branches (all with curl) have colours between stripes as follows :

Engineers :	Dark violet velvet.
Constructors :	Black velvet.
Electricians :	Light violet velvet.
Surgeons :	Scarlet cloth.
Officers of Judicial Department :	Violet cloth.
Supply Officers :	White cloth.
Pharmacists :	Dark green velvet.
Research Chemists :	Light green velvet.

## Administration.

Minister for National Defence: P. Kanellopoulos, M.P.  
Under Secretary of State for The Navy : Lieut.-General (Retd.) S. Georgoulis, M.P.  
Chief of General Naval Staff : Vice-Admiral P. Lappas.

Naval Attaché, London : Captain A. Athanassiou, R.H.N.

## Personnel.

About 11,500 (conscript, 18 months or enlistment).

## Mercantile Marine.

Lloyd's Register appendix, 1954 :  
361 vessels of 1,222,209 tons gross.

Note.—The Admiral's Pendant has been withdrawn.

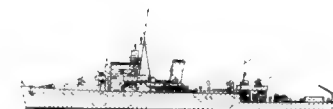
\* Scale 150 ft. = 1 inch



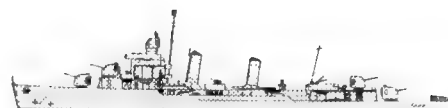
ELLI.\*



ADRIAS Class. \*



POLEMISTIS Class.\*



DOXA, NIKI.\*



THEMISTOKLES Class. \*



ANTIPLOIARKHOS LASKOS.



NAVARINON.\*



APOSTOLIS.\*



HERMES.



PANTHER.\*



TOMBAZIS \*



HEPHAISTOS. \*



GREECE—Cruiser and Destroyers

Cruiser.

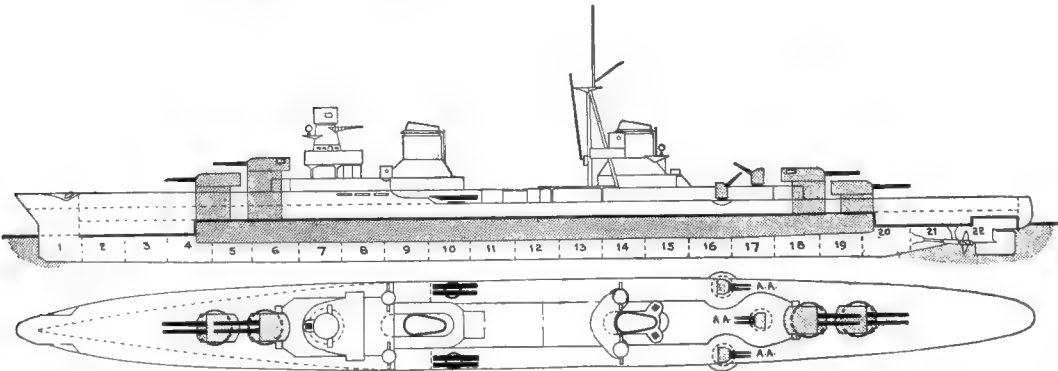
1 Ex-Italian Type.



1952, R.H.N. Official.

ELLI (ex Eugenio di Savoia)

Builders :	Ansaldo
Laid down :	Jan., 1932
Launched :	16 Mar., 1935
Completed :	Jan., 1936
Displacement :	7,283 tons, designed : 8,856 tons, actual (10,660 tons full load)
Dimensions :	Length : 592 (w.l.), 610½ (o.a.) feet. Beam : 57½ feet. Draught : 16½ feet (mean)
Guns :	8—6 inch, 53 cal., 6—3.9 inch, 47 cal. AA., 8—37 mm. AA., 12—20 mm. AA., 2 M.G., 2 D.C.T.
Torpedo tubes :	6—21 inch (tripled)
Armour :	4"—1½" Vert. side, 1½" Deck, 4" Turrets, 3" Barbettes, 4" C.T.
Machinery :	Belluzzo geared turbines, 2 shafts. S.H.P. : 110,000 = 36.5 kts.
Boilers :	6, of 3-drum type
Oil fuel :	1,731 tons
Complement :	551

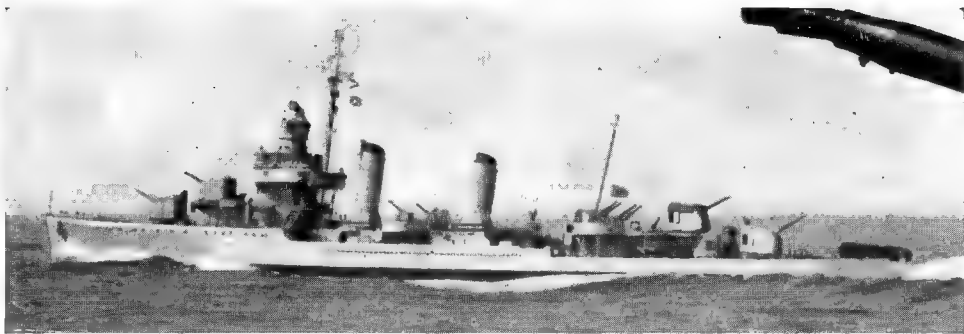


Note to Plan.—Torpedo tubes are tripled, not paired, as shown.

Notes.—Ex-Italian. This ship was assigned to Greece by the Italian Peace Treaty, turned over to Greece in July 1950, and was refitted by Cantieri Navali de Taranto before being delivered on 30 June, 1951. She is an enlarged edition of Italian Montecuccoli. Reported to be very lightly constructed. Equipped for minelaying and can carry 66 to 112 mines.

Destroyers.

2 Ex-U.S. DD Type.



DOXA.

Added, 1952, R.H.N., Official.

DOXA (ex-U.S.S. Ludlow)

NIKI (ex-U.S.S. Eberle)

Displacement :	1,630 tons standard (2,450 tons full load)
Dimensions :	348½ (o.a.) × 36 × 18 (max.) feet
Guns :	4—5 inch, 38 cal., 12—40 mm. (twin), 6—20 mm. AA. (single)
Torpedo tubes :	Removed
Machinery :	General Electric geared turbines. 2 shafts. S.H.P. : 50,000 = 34.5 kts.
Boilers :	4 Babcock & Wilcox
Complement :	250 (war), 188 peace.

Note.—Taken over from U.S.A. 18 April, 1951. Formerly DD 438 and DD 430 respectively. Names mean "Glory" and "Victory."

Gunnery Notes.—The twelve 40 mm. guns are disposed in six twin mountings, two between the funnels and four abreast the mainmast

Pendant No.	Name	Builders	Laid down	Launched	Completed
20	Doxa	Bath Iron Works Corpn.	18 Dec., 1939	11 Nov., 1940	5 Mar., 1941
65	Niki		12 Apr., 1939	14 Sep., 1940	4 Dec., 1940

1 Ex-British Type.



1954, Wright & Logan.

NAVARINON (ex-H.M.S. Echo)

Builders :	Wm. Denny & Bros., Ltd., Dumbarton
Laid down :	20 Mar. 1933
Launched :	16 Feb. 1934
Completed :	25 Oct. 1934
Displacement :	1,375 tons (2,020 tons full load)
Dimensions :	318½ (pp.), 329 (o.a.) × 33½ × 8½ feet (mean)
Guns :	4—4.7 inch, 1—3 inch, AA., 2—40 mm. AA., 2—20 mm. AA.
Tubes :	4—21 inch (in quadruple mounting)
Machinery :	Parsons geared turbines. 2 Shafts. S.H.P. : 36,000 = 31 kts.
Boilers :	3, of 3-drum type, 300 lb. working pressure
Oil fuel :	410 tons
Complement :	145

Notes.—On loan from Great Britain. Salamis (ex-H.M.S. Boreas) which had also been on loan was returned to Great Britain Sep. 1951

# Frigates (Destroyer Escorts)

4 Ex-U.S. DE Type.



PANTHER.

1952, R.H.N. Official.



AETOS.

1952, A. & J. Pavia.

**AETOS** (ex-U.S.S. Slater)  
**IERAX** (ex-U.S.S. Ebert)

**LEON** (ex-U.S.S. Eldridge)  
**PANTHER** (ex-U.S.S. Garfield Thomas)

Displacement : 1,240 tons standard (1,900 tons full load)  
Dimensions : 306 (o.a.) x 36½ x 12 (max.) feet  
Guns : 3—3 inch, 50 cal. d.p., 6—40 mm., (3 twin) 18—20 mm. AA. (9 twin)  
Torpedo tubes : Removed  
A/S weapons : D.C.T.  
Machinery : Diesel-electric. 2 shafts. B.H.P. : 6,000 = 20 kts.  
Complement : 220 (war)

Notes.—Transferred from U.S.A. in 1951 under the Mutual Defense Assistance Program. Formerly DE 766, DE 768, DE 173 and DE 193, respectively. Meanings of names are Eagle, Falcon, Lion and Panther. Aetos and Ierax transferred March 15 1951, Leon and Panther January 15, 1951. Named after late destroyer flotilla bearing these names.

Name	Builders	Launched	Completed
Aetos	Tampa S. B. Co.	13 Feb., 1944	1 May, 1944
Ierax	Tampa S. B. Co.	1944	12 Jul., 1944
Leon	Federal S.B. & D.D. Co.	1943	27 Aug., 1943
Panther	Federal S.B. & D.D. Co.	12 Dec., 1943	24 Jan., 1944

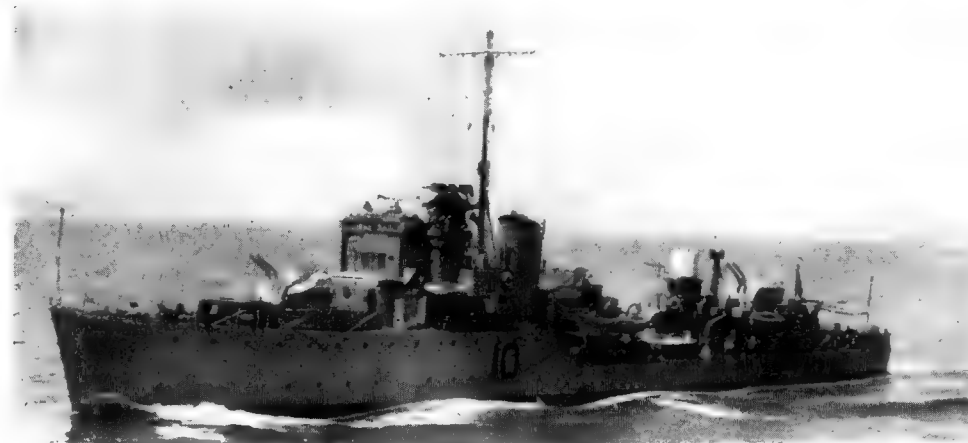
# Frigates (Escort Destroyers).

8 Ex-British "Hunt" Types.



HASTINGS.

1954, R.H.N., Official.



KANARIS.

1953, R.H.N. Official.

**ADRIAS** (ex-Tanatside) **HASTINGS** (ex-Catterick) **KANARIS** (ex-Hatherleigh) **MIAOULIS** (ex-Modbury) **PINDOS** (ex-Bolebroke)

Displacement : 1,050 tons (1,545 tons full load)  
Dimensions : 280 x 31½ x 7½ feet (mean)  
Guns : 4—4 inch, 1—4-barrelled 2-pdr. pompom, 3 (Adrias 2)—20 mm. A.A.  
Tubes : 2—21 inch  
Machinery : Parsons geared turbines. S.H.P. : 19,000 = 26 kts.  
Boilers : 2, of 3-drum type  
Oil fuel : 265 tons  
Complement : 168

Notes.—All above 5 vessels, officially classed as escort destroyers, belong to modified "Hunt" Type III, on loan from Great Britain. Another escort destroyer of this type, *Adrias* (ex-Border), was scrapped owing to heavy damage received when a mine blew away her fo'c's'le on Oct. 22, 1943. *Miaoulis* is fitted as Leader.

Name	Builders	Laid down	Launched	Completed
Adrias	Yarrow & Co., Ltd., Scotstoun, Glasgow	26 Jun., 1941	30 Apr., 1942	4 Sep., 1942
Aegeon	John I. Thornycroft & Co., Ltd., Southampton	21 Dec., 1939	5 Aug., 1941	24 Dec., 1941
Crete	Swan, Hunter & Wigham Richardson, Ltd., Tyne	21 Dec., 1940	25 Jul., 1941	2 Apr., 1942
Hastings	Vickers-Armstrongs, Ltd., Barrow-in-Furness	1 Mar., 1941	22 Nov., 1941	12 Jun., 1942
Kanaris	Vickers-Armstrongs, Ltd., Newcastle-on-Tyne	12 Dec., 1940	18 Dec., 1941	10 Aug., 1942
Miaoulis	Swan, Hunter & Wigham Richardson, Ltd., Tyne	5 Aug., 1941	13 Apr., 1942	25 Nov., 1942
Pindos	Swan, Hunter & Wigham Richardson, Ltd., Tyne	3 Apr., 1941	5 Nov., 1941	27 Jun., 1942
Themistokles	Alex. Stephen & Sons, Ltd., Govan, Glasgow	7 Apr., 1941	29 Jan., 1942	16 Jun., 1942

GREECE—Frigates and Submarines

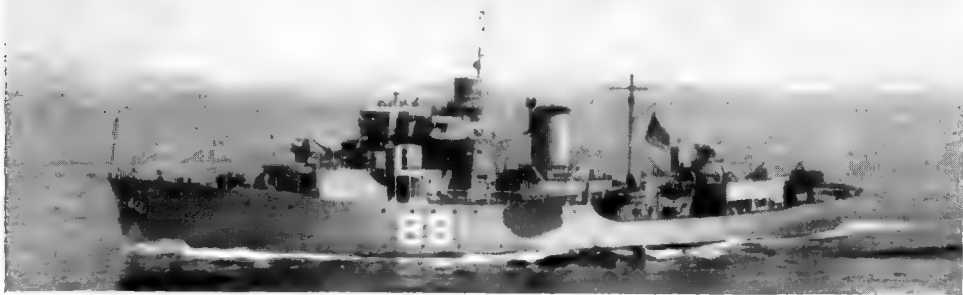
Frigates (Escort Destroyers)—continued.



THEMISTOKLES	1953, R.H.N., Official.
AEGEON (ex-Lauderdale)	CRETE (ex-Hursley)
Displacement :	1,050 tons (1,545 tons full load)
Dimensions :	280 × 31½ × 7½ feet (mean)
Guns :	6—4 inch, 1—4-barrelled multiple pompom, 2—20 mm AA
Tubes :	2—21 inch in Aegeon
Machinery :	Parsons geared turbines. S.H.P. : 19,000 = 25 kts.
Boilers :	2, of 3-drum type
Oil fuel :	280 tons
Complement :	168

Notes.—All above 3 vessels, officially classed as escort destroyers, belong to modified " Hunt " Type II on loan from Great Britain  
For builders and dates see bottom of column 2 preceding page.

Frigates (Corvettes)



TOMBAZIS.	1954, R.H.N., Official.
APOSTOLIS (ex-Hyacinth)	TOMBAZIS (ex-Tamarisk)
Displacement :	1,060 tons (1,250 tons full load)
Dimensions :	190 (pp.), 205 (o.a.) × 32 × 14½ feet
Guns :	1—4 inch AA., (1—3 inch in Apostolis), 1—2 pdr., 2—20 mm.
Machinery :	Triple expansion. I.H.P. : 2,750 = 16 kts.
Boilers :	2 S.E.
Complement :	79,85

Notes.—Both on loan from Royal Navy since 1942-43. Small armament varies. Apostolis is one of the " Flower " class corvettes which were never brought home after going to the Mediterranean in 1940, and consequently she never had the forecastle extended aft nor was rearmed. Tombazis is of modified " Flower " type.

Pendant No.	Name	Builders	Laid down	Launched	Completed
28	Apostolis	Harland & Wolff, Ltd., Belfast	20 Apr. 1940	19 Aug. 1940	4 Oct. 1940
89	Tombazis	Fleming & Ferguson, Ltd., Paisley	10 Feb. 1941	28 July 1941	26 Dec. 1941

Frigates (Corvettes)—continued.



POLEMISTIS.	1951, A. & J. Pavia
ARMATOLOS (ex-Aries, Sept. 19, 1942)	NAVAMACHOS (ex-Lightfoot, Nov. 14, 1942)
MACHITIS (ex-Postillion, Mar. 18, 1943)	POLEMISTIS (ex-Gozo, Jan. 27, 1943)
	PYRROLITIS (ex-Arcturus, Aug. 31, 1942)
Displacement :	1,030 tons, (1,325 tons full load)
Dimensions :	235 (o.a.) × 35½ × 11½ (max. feet)
Guns :	2—3 inch (U.S. Mk. 21), 4—20 mm. AA. (U.S.), 2 Colt-Browning M.G. (except Machitis)
Machinery :	Triple expansion, 2 shafts. I.H.P. : 2,000 = 16.5 kts.
Boilers :	2 of 3-drum type
Complement :	85

Notes.—Formerly escort minesweepers of the " Algerine " class in the Royal Navy. Acquired from the Executive Committee of Surplus Allied Material. Officially classed as corvettes. Launch dates above. Armament of Machitis has been removed and she is now used as a training ship. All built by Redfern Construction Co., except Armatolos, by Toronto Shipyard.

Submarines.

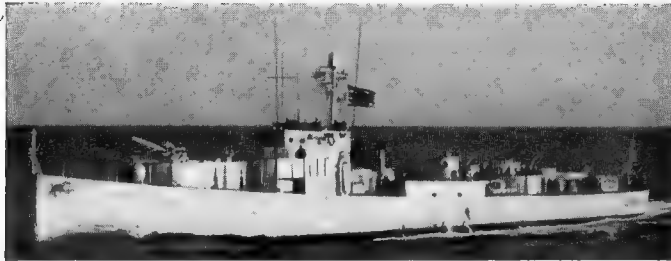


TRIAINA.		1954, R.H.N., Official.	
ARGONAFTIS (ex-Virulent)	DELPHIN (ex-Vengeful)	PIPINOS (ex-Veldt, ex-P 71)	TRIAINA (ex-Volatile)
Displacement :	545 tons standard, 658 tons surface, 740 tons submerged		
Dimensions :	205 × 16 × 12½ feet		
Guns :	1—3 inch, 3 M.G.		
Tubes :	4—21 inch (bow)		
Machinery :	B.H.P. : 800 = 13 kts. surface, H.P. : 760 = 9 kts., submerged		
Oil fuel :	56 tons		
Complement :	31		

Notes.—All on loan from Great Britain since 1943-46.

Pendant No.	Name	Builders	Laid down	Launched	Completed
Y 15	Argonaftis	Vickers-Armstrongs, Ltd., Tyne	30 Mar. 1943	23 May 1944	1 Oct. 1944
Y 9	Delphin	Vickers-Armstrongs, Ltd., Barrow	30 July 1943	20 July 1944	16 Oct. 1944
Y 8	Pipinos	Vickers-Armstrongs, Ltd., Barrow	2 Nov. 1942	19 July 1943	1 Nov. 1943
Y 14	Triaina	Vickers-Armstrongs, Ltd., Tyne	30 Mar. 1943	20 June 1944	4 Nov. 1944

### Patrol Vessels (Gunboats).



ANTIPLOIARKHOS LASKOS.

1952, R.H.N., Official.

**ANTIPLOIARKHOS LASKOS** (ex-PGM 16, ex-PC 1148)  
**ANTIPLOIARKHOS PEZOPOULOS** (ex-PGM 21, ex-PC 1552)  
**PLIOIARKHOS MELETOPOULOS** (ex-PGM 22, ex-PC 1553)  
**PLOTARKHIS ARSLANOGLU** (ex-PGM 25, ex-PC 1556)  
**PLOTARKHIS BLESSAS** (ex-PGM 28, ex-PC 1559)  
**PLOTARKHIS CHANTZIKONSTANDIS** (ex-PGM 29, ex-PC 1565)

Displacement : 280 tons  
 Dimensions : 170 (w.l.), 173½ (o.a.) × 23 × 7½ feet  
 Guns : 1—3 inch, 2—40 mm. AA., 6—20 mm. AA.  
 Machinery : 2 sets G.M. 2 stroke Diesels. 2 shafts. B.H.P. : 3,603 = 19 kts.  
 Oil fuel : 60 tons

Notes.—All launched 1943-44. Presented from U.S. Navy, Aug. 1947. Rated as gunboats.



VASSILEFS GEORGHIOS II.

1952, R.H.N., Official.

**VASSILEFS GEORGHIOS II** (ex-PC 622)

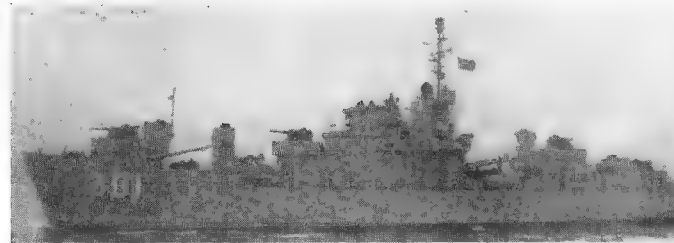
Launched : 1942.

Displacement : 280 tons  
 Dimensions : 170 (w.l.), 173½ (o.a.) × 23 × 7½ feet  
 Guns : 1—3 inch d.p., 1—40 mm. AA., 5—20 mm.  
 A.S. weapons : 4 D.C.T.  
 Machinery : 2 sets G.M. 2-stroke Diesels. 2 shafts. B.H.P. : 3,600 = 19 kts.  
 Oil fuel : 60 tons  
 Complement : 65

Notes.—Transferred from U.S. Navy under Lease-Lend Act, June, 1944. Rated as gunboat.

### Minelayers.

2 Ex-U.S. LSM Type.



AKTION.

1954, R.H.N., Official.

**AKTION** (ex-LSM 301)  
 Displacement : 720 tons standard (1,100 tons full load)  
 Dimensions : 196½ (w.l.), 203½ (o.a.) × 34½ × 7½ (8½ max.) feet  
 Guns : 8—40 mm. d.p. (4 twin mounts), 6—20 mm. AA (single)  
 Mines : Capacity 100 to 130  
 Machinery : 2 Diesels. 2 shafts. B.H.P. : 3,600 = 12½ kts.  
 Range : 3,000 miles  
 Complement : 65

**AMVRAKIA** (ex-LSM 303)  
 Displacement : 720 tons standard (1,100 tons full load)  
 Dimensions : 196½ (w.l.), 203½ (o.a.) × 34½ × 7½ (8½ max.) feet  
 Guns : 8—40 mm. d.p. (4 twin mounts), 6—20 mm. AA (single)  
 Mines : Capacity 100 to 130  
 Machinery : 2 Diesels. 2 shafts. B.H.P. : 3,600 = 12½ kts.  
 Range : 3,000 miles  
 Complement : 65

Notes.—Former United States Landing Ships Medium converted in the U.S.A. into all purpose seagoing minelayers under the terms of the Mutual Defense Assistance Program. Have undergone extensive rebuilding from the deck up. Twin rudders. The Greek flag was hoisted on 1 Dec. 1953.

### Motor Minesweepers.



AFROESSA.

1951, R.H.N., Official.

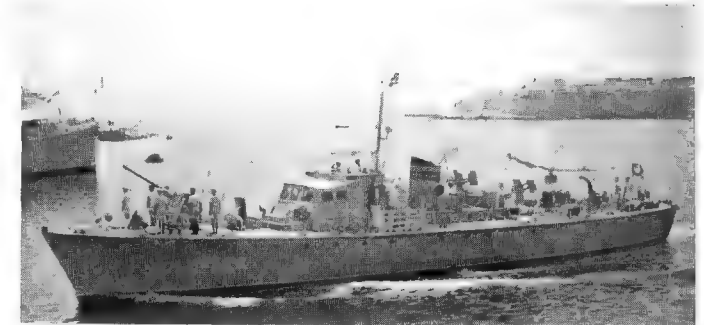
**AFROESSA** (ex-BYMS 2185)  
**ITHAKI** (ex-BYMS 22 0)  
**KALYMNOS** (ex-BYMS 2033)  
**KARTERIA** (ex-BYMS 2065)  
**KEFALINIA** (ex-BYMS 2171)  
**KERKYRA** (ex-BYMS 2172)  
**LEFKAS** (ex-BYMS 2068)

Displacement : 223 tons  
 Dimensions : 136 × 24½ × 6 feet  
 Guns : 1—3 inch, 2—20 mm. AA., 4 M.G., 2 D.C.T.  
 Machinery : Diesel. B.H.P. : 1,000 = 12 kts.  
 Complement : 33

**LEROS** (ex-BYMS 2186)  
**PARALOS** (ex-BYMS 2066)  
**PATMOS** (ex-BYMS 2229)  
**PAXI** (ex-BYMS 2056)  
**SALAMINIA** (ex-BYMS 2067)  
**SIMI** (ex-BYMS 2190)  
**ZAKYNTHOS** (ex-BYMS 2209)

Notes.—Wood. All the names are conventional and are not mentioned in signals or correspondence. Known by numbers.

### Motor Launches.



ELEPHTERON.

1953, A. & J. Pavia.

**DOXATON** (ex-ML 307)  
**DRAMA** (ex-ML 341)  
**ELEPHTERON** (ex-Kalini, ex-ML 478)  
**HALKI** (ex-ML 578)

**KALAMBAKA** (ex-ML 483)  
**KARPENISSI** (ex-ML 867)  
**NISSIROIS** (ex-ML 864)  
**TSATALTZA** (ex-ML 861)

Displacement : 65 tons  
 Dimensions : 112 × 18 × 9 feet  
 Guns : 1—40 mm. AA., 2—20 mm. AA., 4 M.G.  
 Machinery : 2 Hall Scott motors. B.H.P. : 1,200 = 18 kts.

Notes.—Fairmile "B" type. All on loan from Great Britain. Nissiros used as Royal Barge.

### Seaward Defence Motor Launches.



BIZANI.

1951, R.H.N., Official.

**BIZANI** (ex-HDML 1221)  
**DAVLIA** (ex-HDML 1032)  
**DISTRATON** (ex-HDML 1292)  
**FARSALA** (ex-HDML 1252)

**KARIA** (ex-HDML 1307)  
**KASTRAKI** (ex-HDML 1375)  
**KLISSOURA** (ex-HDML 1149)  
**PORTARIA** (ex-HDML 1051)

Displacement : 46 tons  
 Dimensions : 72 (o.a.) × 15½ × 4½ feet (mean)  
 Guns : 1—40 mm., 1—20 mm. AA.  
 Machinery : Diesel. B.H.P. : 300 = 10 kts.

Note.—All on loan from Great Britain.

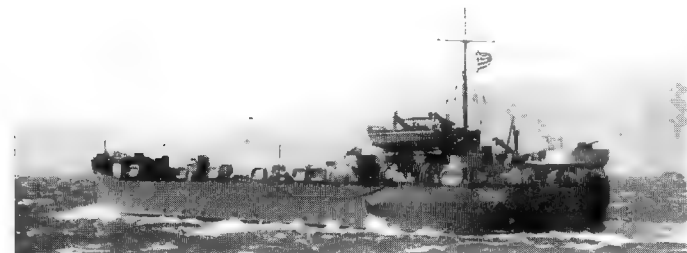
GREECE—Repair Ships, Landing Ships, Oilers, etc.

Tank Landing Ships.



**STRYMON.** 1951, R.H.N., Official.  
**ACHELOOS** (ex-LST 3503)  
**ALFIOS** (ex-LST 3020)  
**ALIAKMON** (ex-LST 3002)  
Displacement : 2,256 tons (4,980 tons full load)  
Dimensions : 330 (w.l.), 347 (o.a.) × 55 × 14½ (max.) feet  
Guns : 10—20 mm. AA.  
Machinery : Triple expansion. 2 shafts. I.H.P. : 5,500 = 13 kts.  
Oil fuel : 1,950 tons

Notes.—All launched 1943, On loan from Great Britain.



**CHIOS.** 1952, R.H.N., Official.  
**CHIOS** (ex-LST 35)  
Displacement : 1,625 tons  
Dimensions : 316 (w.l.), 328 (o.a.) × 50 × 14 feet (max.)  
Guns : 1—3 inch, 6—20 mm. AA.  
Machinery : Diesel. 2 shafts. B.H.P. : 1,700 = 11 kts.  
Oil fuel : 1,000 tons  
Complement : 119

Notes.—All launched 1943. Acquired from U.S. Navy 1943, on Lend-Lease terms. Lesvos (ex-LST 322) returned to the British Government 1953.

Dock Landing Ship.

**NAFKRATOUSSA** (ex-Hyperion, ex-LSD 9)  
Notes.—Taken over by Royal Hellenic Navy in 1953. Headquarters ship of Captain Landing Forces.

Tank Landing Craft.

**AMORGOS** (ex-LCT 1301)  
**ANAFI** (ex-LCT 1293)  
**KANDANOS** (ex-LCT 587)  
**KYTHIRA** (ex-LCT 1198)  
Displacement : 320 to 400 tons.

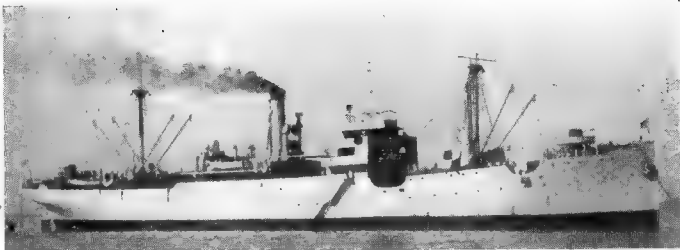
Notes.—All launched 1942.

Assault Landing Craft.

**LCA 1123** **LCA 1525** **LCA 1725** **LCA 1775** **LCA 1886**  
**LCA 1352** **LCA 1618** **LCA 1726** **LCA 1818**  
**LCA 1488** **LCA 1629** **LCA 1746** **LCA 1854**

Notes.—On loan from Great Britain.

Repair Ships.



**HEPHAISTOS** (ex-Khios, ex-Marie Reppel) 1954, R.H.N., Official.  
Displacement : 3,800 tons  
Dimensions : 360½ × 50 × 23 feet  
Guns : 2—3 inch AA., 4—20 mm.  
Machinery : I.H.P. : 2,500 = 11.5 kts.  
Notes.—Former German cargo ship. Built at Rostock. Launched 1920. Converted into Repair Ship 1925. Hephaistos was the patron god of the metal workers.



**HERMES** (ex-Product, ex-Port Jackson) 1953, R.H.N. Official.  
Displacement : 550 tons  
Dimensions : 133 × 27½ × 11 feet  
Machinery : Triple expansion  
Speed : 11 kts.  
Note.—Depot ship for minesweepers. Launched 1941. On loan from Great Britain.

Salvage Vessel.



**SOTIR** (ex-Salventure) 1952, A. & J. Pavia.  
Displacement : 1,440 tons (1,700 tons full load)  
Dimensions : 216 (o.a.) × 37½ × 13 (max.) feet  
Machinery : Triple expansion. 2 shafts. I.H.P. : 1,500 = 12 kts.  
Oil fuel : 310 tons.  
Complement : 60  
Note.—On loan from Great Britain.

Oilers.



**ARGO** (ex-Solna, ex-Granlund, ex-Corbis, ex-War Ranee) 1949, Official.  
Builders : Swan Hunter  
Launched : 1918  
Displacement : 11,715 tons (8,350 tons gross)  
Dimensions : 400 × 52½ × 25½ feet  
Machinery : Triple expansion. I.H.P. : 3,000 = 10 kts.  
Boilers : 3 cylindrical  
Oil fuel : 2,200 tons  
Capacity : 7,310 tons  
**ZEUS** (ex-YOG 98)  
Launched : 1944  
Capacity : 900 tons  
Dimensions : 165 × 35 × — feet  
**PROMETHEUS**  
Launched : 1939  
Capacity : 520 tons  
**KRONOS** (ex-Islay, ex-Dresden)  
Displacement : 311 tons  
Capacity : 110 tons  
**ORION** (ex-U.S. tanker Y 126)  
Capacity : 700 tons  
**KHALKI** (ex-Hemingstedt)  
Capacity : 550 tons  
**XANTHI** (ex-Empire Tigoon, ex-Steingrund)  
Capacity : 1,000 tons  
**POSEIDON** (ex-Empire Faun)  
Capacity : 850 tons  
Note.—On loan.

Transports.

**ANHIALOS** (ex-FT 28, ex-APC 65)  
**DISTOMON** (ex-FT 15, ex-APC 66)  
**ELASSON** (ex-FT 12, ex-APC 67)  
Displacement : 229 tons  
Guns : 2—20 mm. AA.  
**KALAVRITA** (ex-FT 13, ex-APC 71)  
**LEHOVON** (ex-FT 24, ex-APC 73)  
**VELESTINON** (ex-FT 11, ex-APC 75)  
Note.—All built 1943.

Lighthouse Tenders.

**ST. LYKOUDIS** (ex-Chania) Displacement : 1,020 tons  
**SERRAI** (ex-Anna Raeder) Displacement : 725 tons  
**SKYROS**

Water Carriers.

**KALIRROE** Capacity : **KASTALIA** About 130 tons **PIGHI** **STYMPHALIA**

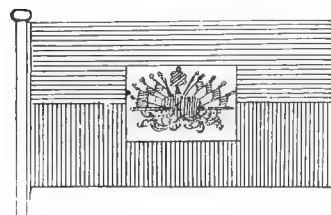
Fleet Tugs.

**AIAS** **ANTAIOS** (ex-Busy) **ENGELADOS** (ex-Confident) **PERSEUS** (ex-ST 772)  
**ATLAS** (ex-F 5) **HERAKLIS** **KENTRAVOS** **SAMSON** (ex-F 16)  
**CYCLOPS** (ex-F 10) **THESEUS** (ex-ST 539)



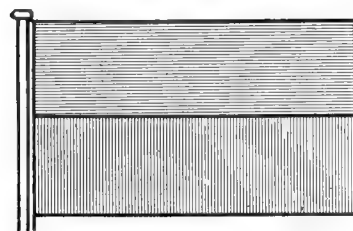
# HAITI

## Flags.



ENSIGN.

 Red  
 White  
 Blue



MERCANTILE.

## Personnel.

About 300 officers and men.

## Patrol Vessels.

**AMIRAL KILLICK** (ex-SC 1348) **16 AOUT 1946** (ex-SC 453)  
**TOUSSAINT L'OUVERTURE** (ex-SC 1064)

Displacement : 110 tons (138 tons full load)  
 Dimensions :  $110\frac{1}{2} \times 18\frac{1}{2} \times 6\frac{1}{2}$  feet  
 Guns : 2—40 mm., 2—20 mm.  
 Machinery : Diesels. 2 shafts. B.H.P. : 1,000 = 15 kts.

Notes.—Pendant Nos. GC 2, GC 4 and GC 3, respectively. Submarine chasers of the SC type acquired during 1947 from the U.S. Navy. Launched 1941-43.

Nos. 1, 2, 3, 4, 5, 6

Displacement : 45 tons  
 Dimensions :  $82 \times 16 \times 4\frac{1}{2}$  feet  
 Guns : 1—20 mm.  
 Speed : 20.5 kts.

Notes.—Patrol craft of picket-boat type acquired from the U.S. Coast Guard. Launched 1942.

**SAYANNAH**

Displacement : 47 tons  
 Dimensions :  $83 \times 16 \times 4\frac{1}{2}$  feet  
 Machinery : Diesels. 2 shafts. B.H.P. : 200 = 9 kts.  
 Complement : 12

Notes.—Ex-U.S.C.G.C. 56200, built U.S.A. 1944, acquired 1944.

## Presidential Yacht.

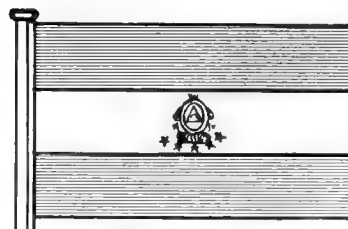
**SANS SOUCI** (ex-Captain James Taylor)

Displacement : 161 tons  
 Machinery : Diesels. 2 shafts. B.H.P. : 300 = 10 kts.

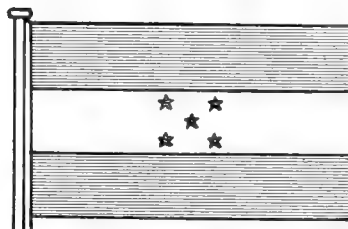
Note.—HAITI section continued at bottom of column 3.

# HONDURAS

## Flags.



ENSIGN.



MERCANTILE.

## Mercantile Marine.

Lloyd's Register appendix, 1954 :  
 146 vessels of 470,858 tons gross.

## Frigate.

**GUAYAS**

Launched : July 31, 1943

Displacement : 1,400 tons  
 Dimensions :  $304 \times 37\frac{1}{2} \times 12$  feet  
 Guns : 3—3 inch d.p., 10—40 and 20 mm. AA. (this original armament may have been modified)  
 Machinery : Triple expansion. 2 shafts. I.H.P. : 5,500 = 18 kts.  
 Boilers : 2, of 3-drum type

Notes.—Another frigate has been reported adapted for mercantile use.

# HAITI, HONDURAS, HUNGARY

# HUNGARY

## Minesweepers.

Note.—Two small minesweepers reported. Displacement : 70 tons.

## Patrol Launches.

Note.—Five patrol launches are in commission, one with displacement of 100 tons.

## River Patrol Vessels.

Notes.—Former Austro-Hungarian Győr, Sopron, Kecskemét and Szeged, all built at Ganz-Danubius Yard, Budapest and launched 1918, 1918, 1915 and 1916, respectively, reported to be scrapped or sold for mercantile use.

## Motor Launches.

Notes.—Honved, Huszar and Tüzer, all launched 1916, reported to be scrapped.

## Depot Ship.

**CSOBÁNC**

Built :	Ganz-Danubius Yard, Budapest
Launched :	1928
Displacement :	305 tons
Dimensions :	$132 \times 18 \times 4\frac{1}{2}$ feet
Machinery :	2 Diesels. Tunnel screws. B.H.P. : 180 = 8 kts.
Oil fuel :	8 tons
Complement	18

## Training Ship.

**BADACSONY**

Displacement	225 tons
Machinery :	H.P. : 400 = 10.5 kts

## HAITI—continued.

**ARTIBONTE** (ex-U.S. LCT)

Displacement :	134 tons standard (285 tons full load)
Dimensions :	$120\frac{1}{2}$ (o.a.) $\times 32 \times 4\frac{1}{2}$ feet
Machinery :	3 diesels. B.H.P. : 675 = 8 kts.
Complement :	12

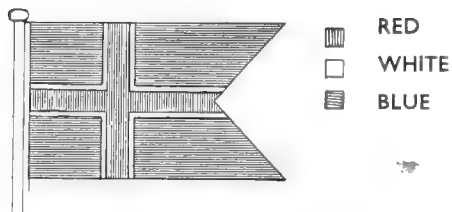
Notes.—Salvaged by Haitian Coast Guard after grounding. Pendant No. GC 5.

**VERTIERAS** (ex-U.S.S. APC 92)

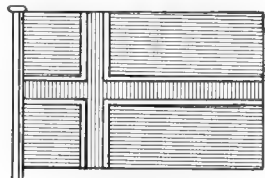
Displacement :	173 tons standard (258 tons full load)
Dimensions :	$103\frac{1}{2}$ (o.a.) $\times 21\frac{1}{2} \times 9\frac{1}{2}$ feet
Machinery :	Diesel. B.H.P. : 400 = 10 kts.
Complement :	25

Notes.—Built in U.S.A. 1943. Purchased from U.S.A. 1951. Employed as buoy tender.

Flags.



NATIONAL FLAG

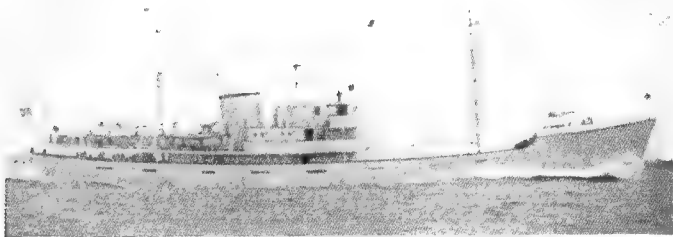


MERCANTILE.

Mercantile Marine.

Lloyd's Register appendix, 1954 : 137 vessels of 81,727 tons gross.

Patrol Vessel.



1953, Official.

**THOR**  
Built : Aalborg, Denmark  
Launched : 1951  
Measurement : 693 tons gross  
Length : 183½ (pp), 206 (o.a.) feet  
Guns : 1—57 mm., 2—47 mm.  
Machinery : 2 Crossley Diesel motors. B.H.P. 3,200  
Speed : 18 kts.  
Complement : 28

Note.—Completed and commissioned for service late 1951. Rated as coastal inspection and salvage vessel.

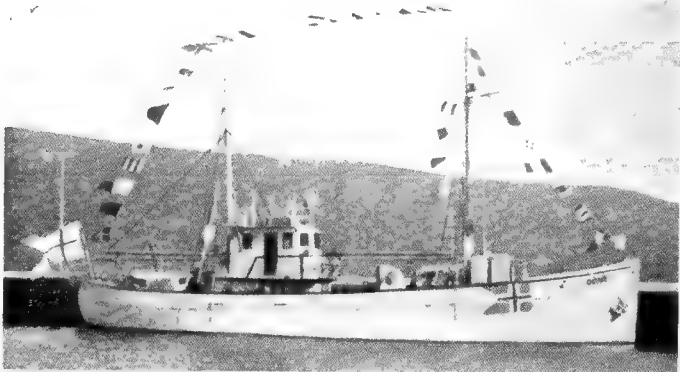
ICELAND

Fishery Protection Vessels.



1953, Official.

**MARIA JÚLIA**  
Built : Frederikssund, Denmark  
Launched : 1950  
Measurement : 138 tons gross  
Length : 90½ feet  
Guns : 1—47 mm.  
Machinery : Petters Diesel motor. B.H.P. : 470  
Speed : 12 kts.  
Complement : 12



1953 Official.

**ODINN**  
Launched : 1938  
Displacement : 72 tons  
Guns : 1—47 mm.  
Machinery : Petters Diesel Motor. B.H.P. : 425 = 11 kts.  
Complement : 11

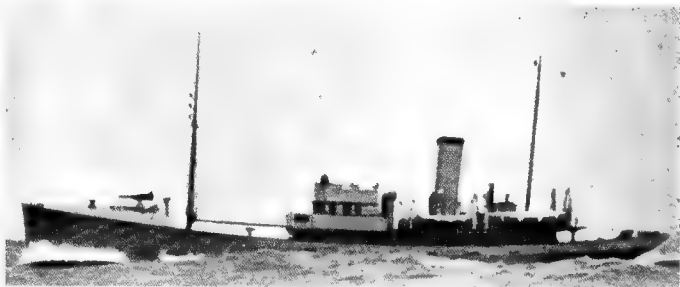
Note.—Ketch with auxiliary motor.

Fishery Protection Vessels—continued.

SÆBJORG

Built : Frederikssund, Denmark  
Launched : 1937  
Measurement : 98 tons gross  
Length : 80½ feet  
Guns : 1—47 mm.  
Machinery : Atlas Imperial Diesel motor. B.H.P. : 320  
Speed : 10 kts.  
Complement : 11

Notes.—Rebuilt enlarged and engined 1947



1953, Official.

ÆGIR

Builders : Burmeister & Wain, Copenhagen  
Launched : April 25, 1929  
Measurement : 507 tons gross  
Length : 171½ feet  
Guns : 1—57 mm.  
Machinery : B. & W. Diesel engines. B.H.P. : 1,300  
Speed : 14 kts.  
Complement : 25

Lighthouse Tender.

HERMODUR

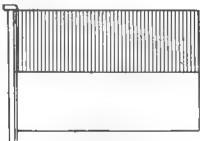
Built : Stockholm  
Launched : May 19, 1947  
Measurement : 208 tons gross  
Length : 111½ feet  
Guns : 1—47 mm.  
Machinery : Atlas Diesel motor. B.H.P. : 390  
Speed : 12 kts.  
Complement : 13

Note.—Rated as Lighthouse Tender, but employed as Fishery Patrol Vessel during the Winter.

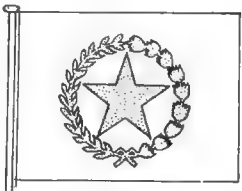
# INDONESIA

**ALRI** : Angkatan Laut Republic Indonesia (Naval Forces Republic of Indonesia).

## Flags.



NATIONAL

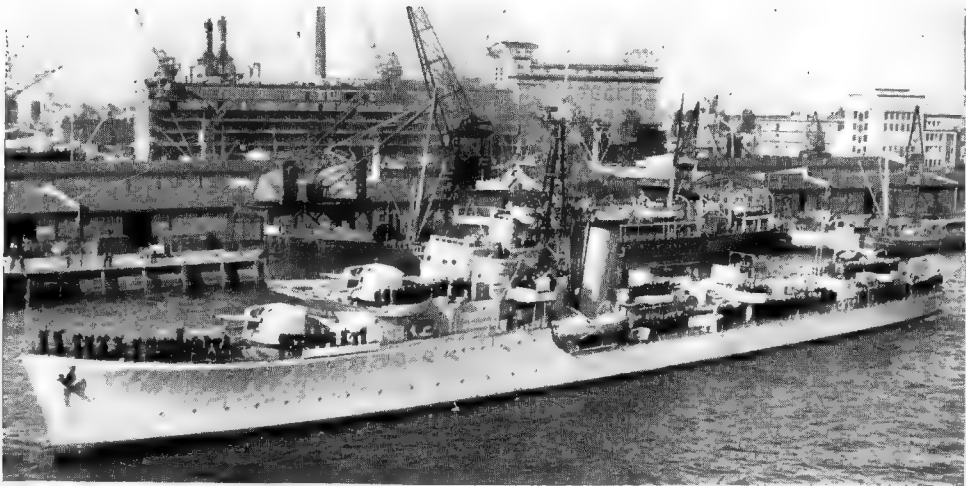


PRESIDENT.

## Personnel.

7,675 officers and men including 1,576 Marine Corps personnel.

## Destroyer.



GADJAH MADA.

Added 1951.

**GADJAH MADA** (ex-Tjerk Hiddes, ex-Nonpareil)

Builders :	Wm. Denny & Bros. Ltd., Dumbarton
Laid down :	22 May, 1940
Launched :	25 June, 1941
Completed :	30 Oct. 1942
Displacement :	1,760 tons standard (2,540 tons full load)
Dimensions :	348 (pp.), 356½ (o.a.) × 35½ × 9 feet
Guns :	6—4.7 inch, 4—40 mm. AA., 6—20 mm. AA.
Tubes :	10—21 inch (quintupled)
Machinery :	Parsons geared turbines. 2 shafts. S.H.P. : 40,000 = 36 kts. designed (30.5 kts. sea speed)
Boilers :	2, of 3-drum type
Complement :	246

No.es.—Formerly British. Purchased from Great Britain by Netherlands 1941. Transferred from the Royal Netherlands Navy to Indonesian Navy on March 1, 1951. Flagship of the Indonesian Navy. Pendant No. D 806.

## New Construction Programme.

Ansaldo, Italy, has secured a contract to build two escorts of 1,400 tons and two frigates of 1,100 tons. Also reported there is a questionable possibility of Ansaldo building a submarine for Indonesia under this contract. Three patrol boats are under construction at the yard of I. S. Figee at Vlaardingen which will be equipped with a caterpillar engine of 350 h.p. Five minesweepers are under construction in Germany.

## Naval Strength.

1 Destroyer	18 Patrol Vessels	2 Supply Ships
4 Corvettes	2 Torpedo Boats	1 Auxiliary
2 Motor Minesweepers	5 Landing Craft	1 Oiler
6 Minesweeping Boats	1 Salvage Ship	3 Harbour Tugs

## Frigates (Corvette Type).

4 "Banteng" Class.



1951, Indonesian Navy, Official.

**BANTENG** (ex-Ambon, ex-Cairns)  
**HANG TUAH** (ex-Morotai, ex-Ipswich)

Displacement	815 tons standard (1,025 tons full load)
Dimensions :	162 (pp.), 186 (a.a.) × 31 × 8½ feet
Guns :	1—4 inch, 1—40 mm. AA., 4—20 mm. AA.
Machinery :	Triple expansion. 2 shafts. I.H.P. : 2,000 = 15.5 kts.
Boilers :	2, of 3-drum type
Complement :	56 to 70

**PATI UNUS** (ex-Tidore, ex-Tamworth)  
**RADJAWALI** (ex-Banda, ex-Wollongong)

General Notes.—All built in Australia as ocean minesweepers. *Hang Tuah* and *Pati Unus* were transferred from Royal Netherlands Navy, Dec. 28, 1949. *Banteng* and *Radjawali* April 6, 1950.

Historical Note.—*Hang Tuah* was named after a naval hero who repulsed a Chinese invasion in the fifteenth century.

Name	Builders	Launched
<i>Banteng</i>	Walkers, Maryborough	7 Oct., 1941
<i>Hang Tuah</i>	Evans Deakin, Brisbane	11 Aug., 1941
<i>Pati Unus</i>	Walkers, Maryborough	14 Mar., 1942
<i>Radjawali</i>	Cockatoo Docks & Eng. Co.	5 Jul., 1941

INDONESIA—Patrol Vessels, etc.

Surveying Vessel.



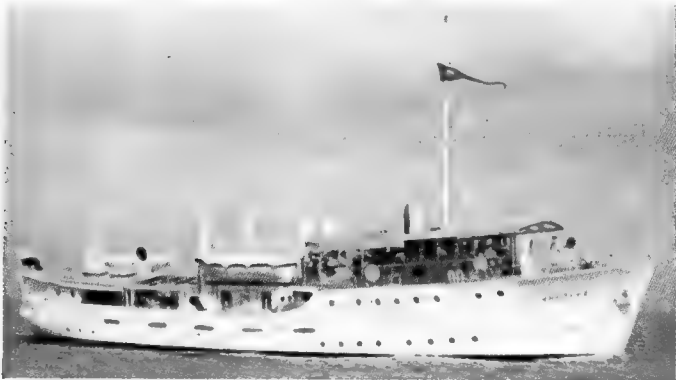
1954, courtesy P. Bronsveld.

BURDJAMHAL

Builders : Scheepswerf De Waal, Zaltbomme  
Launched : 6 Sept. 1952  
Completed : 6 July 1953  
Displacement : 1,200 tons  
Dimensions : 211½ (o.a.) 192 (p.p.) × 33½ × 10½ feet  
Machinery : 2 Werkspoor Diesel Engines. B.H.P. : 1,160  
Complement : 90

Notes.—Commissioned 16th July 1953 and sailed the same month from Rotterdam to Indonesia.

Deep Sea Exploration Vessel (Laboratory Ship)



SAMUDERA

1953.

Builders : Ferus Smit, Foxol  
Launched : 28 May 1952  
Completed : 28 Aug. 1952  
Measurement : 200 tons gross  
Dimensions : 125½ × 21½ × 9½ feet  
Machinery : Werkspoor Diesel Engine. B.H.P. : 450

Notes.—Same type as "Bango" class motor patrol vessels, but equipped as a laboratory ship. Commissioned 29 Aug. 1952. Used for deep sea exploration in Indonesian waters.

Lighthouse Tender.



1953, courtesy P. Bronsveld.

BIDUK

Builders : J. & K. Smit, Kinderdijk  
Launched : 30 Oct. 1951  
Completed : 30 July 1952  
Displacement : 1,250 tons  
Dimensions : 213½ (o.a.) × 39½ × 11½ feet  
Machinery : 1 Triple expansion engine. I.H.P. : 1,600 = 12 kts.  
Complement : 66

Note.—Commissioned 30 July 1952. Depth : 14½ feet.

Training Ship.



1954, Skyfotos.

DEWARUTJI

Builders : H. C. Stülcken & Sohn, Hamburg  
Launched : 24 Jan. 1953  
Completed : 9 July 1953  
Displacement : 810 tons (1,500 tons full load)  
Dimensions : 191½ (o.a.), 136½ (pp.) × 31½ × 13½ feet  
Machinery : MAN Diesel engine. B.H.P. : 600 = 10.5 kts.  
Complement : 110 (32 + 78 midshipmen)  
Notes.—Training ship for Indonesian Navy, built in Germany. 3-masted sailing vessel of iron construction. Sail area 1305 sq. yds. (1,091 sq. metres). Speed with sails 12.8 kts. Commissioned July 1953.

Patrol Vessels.

6 "Balam" Class

BALAM  
BARAU

BEKAKA  
BELATIK

BENDALU  
BOGA

Measurement : 200 tons gross.  
Dimensions : 125½ (o.a.) × 21½ × 6½ feet  
Machinery : Werkspoor Diesel engine. B.H.P. : 400-430 = 11 kts.

Notes.—All new construction. Balam and others commissioned in 1953.

Name	Builders	Launched
Balam	Jonker & Stans, Hendrick-Ide-Ambacht	1953
Barau	Bodewes, Martenshoek	3 July 1953
Bekaka	Gebrs. Boot, Leiden.	6 June 1953
Belatik	Scheepswerf Jansen, Druten.	21 May 1953
Bendalu	H. J. Koopman, Dordrecht.	11 Apr. 1953
Boga	Scheepswerf Stapel, Spaarndan.	19 Mar. 1953

7 "Bango" Class



BETTET

1953.

Launched	Launched
3 Werf De Klop, Sliedrecht	1 Gebr Niestom, Delfzijl
BANGO 22 Apr. 1952	BEO 5 June 1952
BABUT 20 May 1952	I de Vries Lentsch, Alphen
BETTET 7 May 1952	BIDO 25 Sep. 1952
I L. Smit & Zn., Kinderdijk	I Jonker & Stans, H. I. Ambacht
BLEKOK 20 May 1952	BLIBIS 17 Dec. 1952
Measurement : 194 tons gross	
Dimensions : 120½ (pp.) 125½ (o.a.) × 21½ × 6½ feet	
Machinery : Werkspoor Diesel engine. B.H.P. : 430 = 11 kts.	

7 "Durian" Class

Launched	Launched
5 De Vries Lentsch, Alphen a.d. Rijn	2 Werf Figuee, Vlaardingen
DAIK Dec. 1952	DAGONG 4 Sep. 1952
DAMARA 20 Dec. 1952	DATA 19 June 1952
DUATA 16 July 1952	
DUKU Nov. 1952	
DURIAN 20 Mar. 1952	

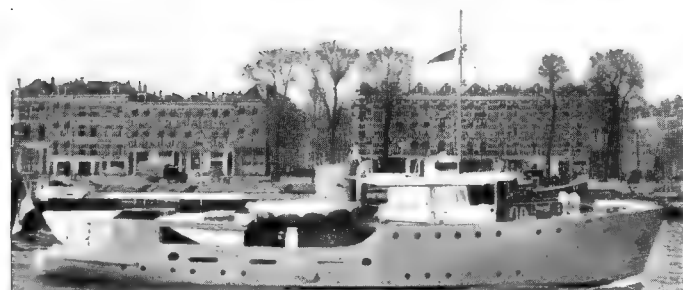
Displacement : 90 tons  
Dimensions : 8½ × 16 × 6½ feet  
Machinery : Taterpillar Diesel Engine. B.H.P. : 190

Oiler

TJEPU

Dimensions : Length : 226 feet

## Patrol Vessels—continued.



AMPOK.

1950.

2 Gebr. Bodewes, Martenshoek  
ARYAT  
ATTAT  
2 J. & K. Smit, Kinderdijk  
AMPOK  
AMPIS  
2 Gebr. Boot, Alphen a.d. Rijn  
ANGANG  
ANGKLOENG

1 L. Smit & Zn., Kinderdijk  
ANDIS  
1 Gebr. Niestern, Delfzijl  
ANTANG  
1 J. Smit, Foxhol  
AROKWES  
3 Werf Gusto (A. F. Smulders), Schiedam  
ALKAI  
ALULU  
ALLAP

Displacement : 143 tons (247 tons full load)  
Dimensions :  $124\frac{1}{2} \times 18\frac{1}{2} \times 5\frac{1}{2}$  feet  
Guns : 1—37 mm. 4 M.G.  
Machinery : Enterprise Diesel engine. B.H.P. : 400-450 = 12 kts.  
Complement : 20

Note.—Built in Netherlands for Indonesia. Ampok and Alkai were shipped to Indonesia March 17, 1950. Four more followed.

## Seaward Defence Motor Launches.



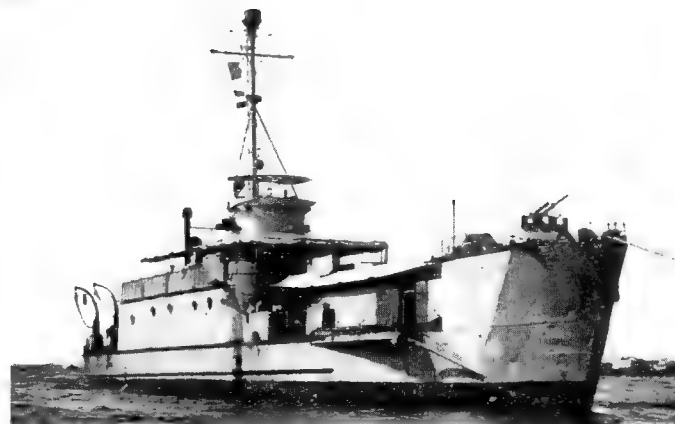
1951, Indonesian Navy, Official.

PP 01	PP 06	PP 011	PP 016	PP 021
PP 02	PP 07	PP 012	PP 017	PP 022
PP 03	PP 08	PP 013	PP 018	PP 023
PP 04	PP 09	PP 014	PP 019	PP 024
PP 05	PP 10	PP 015	PP 020	PP 025

Guns : 1—37 mm., 2—20 mm. Oerlikon M.G.  
Complement : 10

Note.—All ex-Netherlands patrol vessels.

## Landing Craft.



AMAHAI (ex-Tropenvogel, LCI 467)  
BARUNA (ex-Ijsvogel, LCI 948)  
MARICH (ex-Zeemeew)

Displacement : 381 tons full load  
Dimensions :  $153 \times 23 \times 7$  feet  
Guns : 1—37 mm., 2 Vickers M.G.  
Machinery : G.M. (Super High Speed Diesel). B.H.P. : 1,800 = 15 kts.  
Complement : 60

1951, Indonesian Navy, Official.  
NAMLEA (ex-Stormvogel, LCI 588)  
PIRU (ex-Zeearend, LCI 420)

## Tenders.



1954, Korody Marine Corporation.

BHAYAMKARA I, II, III (ex-U.S. SC 129, 1318, 1048)

Note.—Operated by Indonesian Marine Police.

MERBABU (ex-Merbaboe)

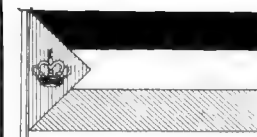
Displacement : 80 tons  
Dimensions :  $74\frac{1}{2} \times 14\frac{1}{2} \times 5$  feet  
Guns : 12.7 mm. Vickers, 2—7.7 mm. Lewis  
Machinery : Diesel. B.H.P. : 135 = 10 kts.  
Complement : 20

RINDJANI

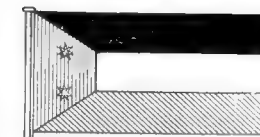
DJAMPEA

(1940)  
Measurement : 130 tons gross  
Dimensions :  $113\frac{1}{2} \times 18\frac{1}{2} \times 6\frac{1}{2}$  feet  
Machinery : Diesel. B.H.P. : 360 = 10 kts.  
Complement : 10

## IRAQ



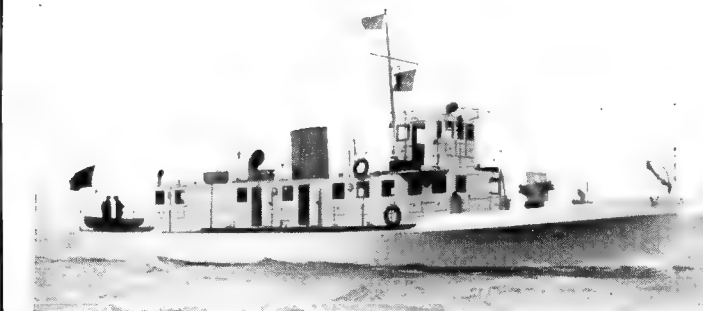
ROYAL STANDARD.



ENSIGN AND NATIONAL.

Black  
White  
Red  
Green

## Patrol Vessels.



No. 1	No. 2	No. 3	No. 4
Displacement :	67 tons		
Dimensions :	$100 \times 17 \times 3$ feet (mean)		
Guns :	1—3.7 inch howitzer, 2—3 inch mortars, 4 M.G.		
Machinery :	2 Thornycroft 6-cyl. Diesels. 2 shafts. B.H.P. : 280 = 12 kts.		

Notes.—Protected by bullet-proof plating. All built by Thornycroft and launched 1937.

## Lighthouse Tender.



FAISAL I (ex-Sans Peur, ex-Restless)

Displacement : 1,025 tons  
Dimensions :  $186 \times 29\frac{1}{2} \times$  — feet  
Machinery : Triple expansion. 2 shafts. I.H.P. : 850 = 13 kts.  
Boiler : 1 oil-fired

Notes.—Built at Clydebank. Launched 1923.

## Tug.

ALARM (ex-St. Ewe)

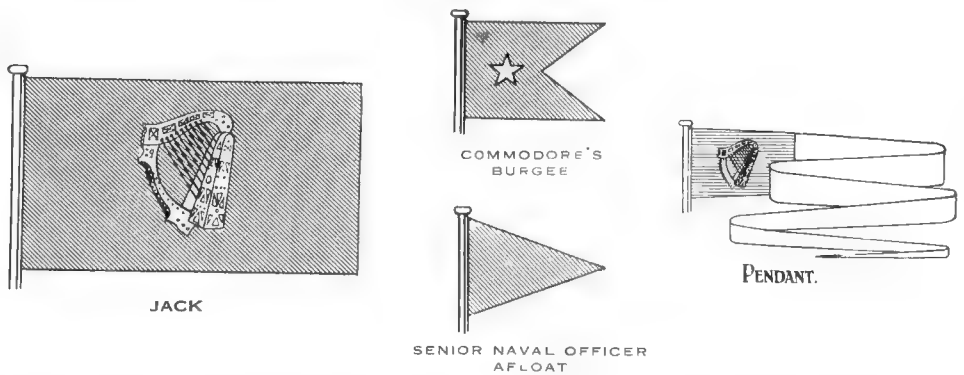
Displacement : 820 tons  
Dimensions :  $135 \times 30 \times 14\frac{1}{2}$  feet  
Machinery : I.H.P. : 1,200 = 12 kts.  
Boilers : 2 oil-fired

Notes.—Built by Murdock & Murray. Launched 1919.



IRISH NAVAL SERVICE

Flags.



The Ensign worn by public armed ships of the Naval Service and their boats is the National Flag. The Jack is of green wool bunting with a Harp, as in the Arms of Ireland, embroidered centrally in yellow bunting. The Commissioning Pendant (Masthead Pendant) consists of a long narrow tapering pendant of blue and white bunting with a Harp device in yellow bunting embroidered centrally in the blue portion. The Commodore's Flag is a burgee of green wool bunting with a five-pointed star embroidered centrally in yellow bunting with one point upwards. The Senior Officer's Flag is a triangular flag of green wool bunting.

Uniforms.



Lieutenant-Commanders : 2½ stripes ; Sub-Lieutenants : 1½ stripes (thin one on top) ; Warrant Officers : ½ stripe (thin) with no star. Executive Officers : No colour. Supply and Administrative : White. Technical : Maroon. Cap Badges : Similar to R.N. but with crown replaced by Army Crest, a gold sunburst with letters FF ("Fianna Fail") in gold lettering on red background in centre.

Administration.

Minister for Defence : General Sean MacEoin  
Director of Irish Naval Service : Commodore H. J. A. S. Jerome, D.S.O., I.N.S.

Personnel.

Establishment provides at present for a permanent force of 560 all ranks. Officers have I.N.S. after their names (Irish Naval Service). Reserves : There is a naval reserve (Sluagh Muiri), composed of yachtsmen, etc., with centres at Dublin, Cork, Limerick, Dun Laoghaire and Waterford.

Ships and Bases.

Ship's names are prefixed "L.E." (Long Eireannach = Irish Ship). Naval Base and Dockyard : Situated at Haulbowline Island in Cork Harbour, where all training is done and most ships based.

Frigates (Corvettes).

3 Ex-"Flower" Class.



MACHA. 1953, courtesy Irish Press.

CLIONA (ex-Bellwort)	MACHA (ex-Borag)	MAEV (ex-Oxlip)
Displacement : 1,020 tons (1,280 tons full load)	190 (pp.), 205 (o.a.) × 33 × 14½ feet	
Dimensions :	1—4 inch D.P., 1—2 pdr., 2—20 mm. A.A.	
Guns :	Hedgehog	
A/S weapons :	Triple expansion. I.H.P. : 2,750 = 16 kts.	
Machinery :	2 S.E.	
Boilers :	78	
Complement :		

Notes.—Formerly "Flower" class corvettes in Royal Navy of the type later re-rated as frigates. Purchased from Great Britain in 1946. Respective pendant Nos. are 03, 01, 02. Macha is fitted as Leader, and is markedly different from others with a longer upper deck and one of the mess-decks converted into a suite of cabins for the senior officer of the flotilla. Lattice mast stepped 1953.

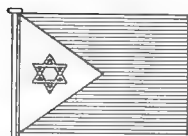
JOHN ADAMS	GENERAL McHARDY	WYNDHAM
Builders : Thorne, Yorks.	Builders : Dartmouth	Builders : Cox, Falmouth.
Launched : 1934	Launched : 1928	Launched : 1903
Measurement : 94 tons gross	Measurement : 100 tons gross	Measurement : 93 tons gross
Dimensions : 85 × 18½ × 7 feet	Dimensions : 76½ × 18 × 9½ feet	Dimensions : 85 × 16½ × 8 feet
Machinery : Diesel. B.H.P. : 125 = 8 kts.	Machinery : Compound reciprocating. I.H.P. : 200 = 9 kts.	Machinery : Compound reciprocating. I.H.P. : 200 = 9 kts.

## ISRAEL

## Flags.



NATIONAL



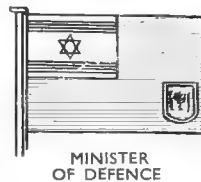
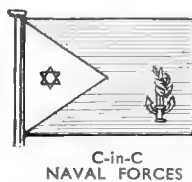
ENSIGN



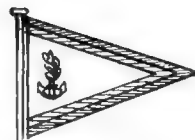
MERCANTILE



PRESIDENT

MINISTER  
OF DEFENCEC-in-C  
NAVAL FORCES

PENDANT



SENIOR OFFICER



DEVICE



DARK BLUE.

LIGHT BLUE.

SILVER.

The National Flag is white with two horizontal blue stripes and the blue Shield of David in the centre.

The device in the Senior Officer's flag is similar to that on the uniforms.

## Administration.

Commander-in-Chief Naval Forces: Commodore M. Limon.  
Naval Attaché in London: Colonel K. P. Salmon.

## Mercantile Marine.

Lloyd's Register appendix, 1954 :  
32 vessels of 119,218 tons gross.

## Uniforms.



COMMODORE CAPTAIN COMMANDER LT. COMDR LIEUT JUNIOR LIEUT SUB LIEUT

Aloof Aloof Sgan Aloof Rav Seren Segen Segen Mishne

The device above the stripes is as indicated under flags in Column I.  
It is a sword with anchor flutes at the hilt and an olive branch intertwined.

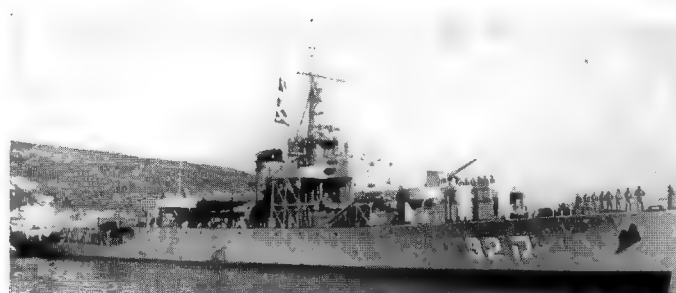
Coloured velvet cloth between stripes as follows :

Engineer Officers :	Maroon
Medical Officers :	Red
Supply Officers :	Light Blue
Administrative Officers :	Green

The Officers' cap badge also has the sword, anchor flute hilt and olive branch as a centrepiece surrounded by leaves.

## Frigates.

## 3 Ex-Canadian "River" Class



MISNAK.

1954, Official.

**MISGAV** (ex-H.M.C.S. *Strathadam*) **MITVAKH** (ex-*Violetta*) **MISNAK** (ex-*Hallowell*)

Displacement :	1,445 tons (2,360 tons full load)
Dimensions :	301½ × 36½ × 12 feet
Guns :	2—4 inch, 10—20 mm. A.A.
Machinery :	H.P. : 5,500 = 20 kts.

Notes.—Canadian "River" type. *Misgav* built by Yarrows Ltd., Esquimalt, B.C., launched 20 March, 1944, completed 29 Sep. 1944.

## Frigates—continued.

## 2 Ex-Canadian "Flower" Class



HAGANA.

1952, Official.

**HAGANA** (ex-*Balboa*, ex-H.M.C.S. *Norsyd*) **WEDGEWOOD** (ex-H.M.C.S. *Beauharnois*)

Displacement :	970 tons (1,350 tons full load)
Dimensions :	208½ × 33 × 18 feet
Guns :	2—4 inch, 10—20 mm. AA.
Machinery :	I.H.P. : 2,750 = 16.5 kts.

Notes.—"Flower" type. Rated as corvettes. Both built by Morton Ltd., Quebec City, P.Q. *Hagana* launched 31 July, 1943, completed 22 Dec. 1943. *Wedgewood* completed 25 Sep. 1944.

## Coast Guard Vessels.



MAOZ.

MAOZ

Displacement :	1,700 tons
Dimensions :	240 × 39 × 17½ feet
Machinery :	Turbo-electric. S.H.P. : 2,600 = 15 kts.

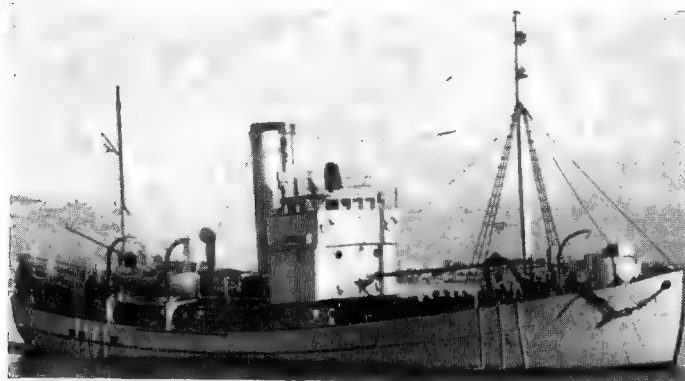
Note.—Ex-United States Coast Guard Cutter.

**NOGAH** (ex-PC 16)

Displacement :	295 tons (450 tons full load)
Dimensions :	173½ × 23 × 10 feet
B.H.P. :	1,746 = 18 kts.
Complement :	70

## ISRAEL—Minesweepers, Motor Torpedo Boats, Landing Craft

### Minesweepers.



DROM A I.

1953 official.

#### DROM A I

#### DROM A II

Displacement : 300 tons  
Dimensions : 130 × 25 × 13 feet  
Guns : 1—3 inch, 1—20 mm. AA.  
Machinery : 1 H.P. : 500 = 10 kts.

Notes.—Built in South Africa. Trawler type

### Training Ship.



EILAT.

1952, Official

EILAT (ex-U.S.C.G.C. Northland)

Displacement : 2,150 tons  
Dimensions : 216½ × 39 × 17 feet  
Guns : 1—3 inch, 4—20 mm. AA.

Notes.—Ex-United States Coast Guard Cutter.

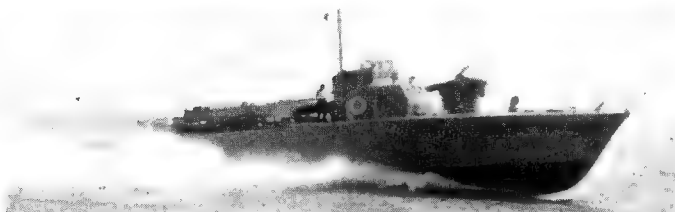
### Motor Torpedo Boats.

#### 4 Meulan Type.



T 207.

1953, courtesy Builders.



T 208.

1953, courtesy M. Henri Le Masson.

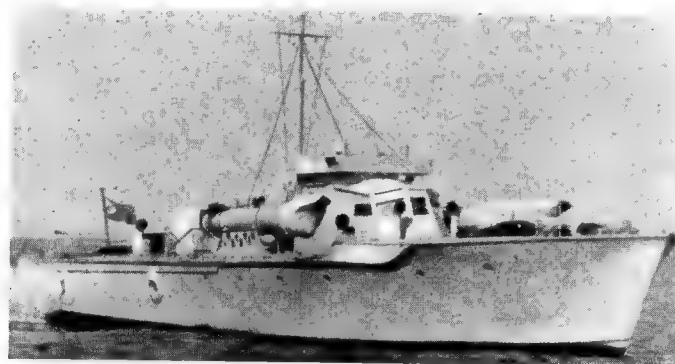
#### T 207

Displacement : 62 tons  
Dimensions : 85½ (o.a.) × 20½ × 5 feet  
Guns : 1—40 mm., 4—20 mm. A.A.  
Torpedoes : 2—18 inch  
Machinery : 4 Arsenal Marine Petrol Engines. 2 shafts.  
B.H.P. : 4,600 = 40 kts.

Notes.—Built by Chantiers de Meulan.

#### T 208

#### 9 Vosper Type.



1952, Official.

Displacement : 43 tons  
Dimensions : 70 × 19 × 5 feet  
Guns : 1—40 mm., 2—20 mm. AA.  
Tubes : 2—18 inch  
Machinery : 3 Packard engines. B.H.P. : 4,050 = 40 kts.

Notes.—Flotilla of M.T.B.s. purchased in Great Britain. Vosper type. Built 1942.

### Motor Launches.



HAPORTZIM.

1952, Official.

#### HAPORTZIM

Displacement : 65 tons (86 tons full load)  
Dimensions : 112 × 18½ × 5 feet  
Guns : 3—20 mm. AA.  
Speed : 19 kts.

Note.—Fairmile "B" type.

#### DROR

#### SAAR

#### TIRTSA

Displacement : 46 tons (54 tons full load)  
Dimensions : 72 × 16 × 5½ feet  
Guns : 1—40 mm., 1—20 mm. AA.  
Speed : 12 kts.

Note.—HDM flotilla.

### Landing Craft.

#### One Flotilla LCT

Displacement : 143 tons (309 tons full load)  
Dimensions : 120 × 33 × 4 feet  
Machinery : 3 Diesels. B.H.P. : 675 = 10 kts.



LCI.

1954, official.

#### One Flotilla LCI

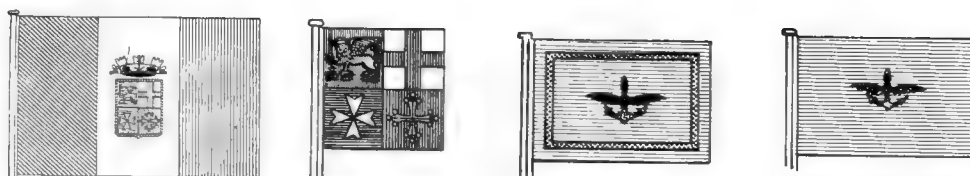
Displacement : 387 tons  
Dimensions : 159 × 23 × 5½ feet  
Guns : 3 M.G.  
Speed : 14-4 kts.

#### One Flotilla LCM

Displacement : 22 tons (60 tons full load)  
Dimensions : 50 × 14 × 3½ feet  
Machinery : 2 Diesels. B.H.P. : 450 = 11 kts.

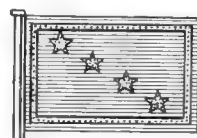
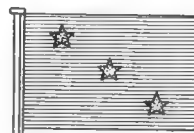
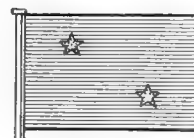
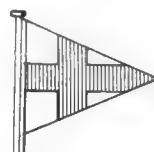
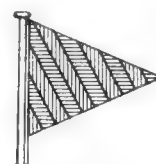
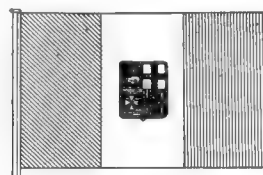
## ITALY

## Flags.



ENSIGN

JACK

MINISTER  
OF DEFENCEUNDER SECRETARY  
OF MINISTRY  
OF DEFENCECHIEF OF NAVAL  
STAFFAMMIRAGLIO  
DI SQUADRAAMMIRAGLIO  
DI DIVISIONECONTRAMMIRAGLIO  
(star is actually  
five-pointed)CAPITANO DI  
VASCELLO  
(commanding  
division)SENIOR NAVAL  
OFFICERFLOTILLA  
LEADER

MERCANTILE



## Administration.

Minister of Defence : Paolo Emilio Taviani.

Chief of Naval Staff : Ammiraglio di Squadra Emilio Ferreri.

Deputy Chief of Naval Staff : Ammiraglio di Divisione Luciano Bigi.

Commander-in-Chief Naval Forces : Ammiraglio di Squadra Franco Zannoni.

Naval Attaché in London : Contrammiraglio Ernesto Giuriati, Lt. N.

## Uniforms.

Ammi-  
raglio di  
Squadra  
designato  
d'Armata.  
Admiral.Ammi-  
raglio di  
Squadra.  
Vice-  
Admiral.Ammi-  
raglio di  
Divisione.  
Rear-  
Admiral.Contr-  
ammi-  
raglio.  
Rear-  
Admiral.Capitano  
di  
Vascello.  
Captain.Capitano  
di  
Fregata.  
Com-  
mander.Capitano  
di  
Corvetta.  
Lieut.-  
Com.Tenente  
di  
Vascello.  
Lieut.Sotto-  
tenente  
di  
Vascello.  
Sub.-  
Lieut.Guardia-  
marina.  
Acting  
Sub.-Lt.Aspir-  
ante.  
Midship-  
man.

Three Ammiragli di Squadra have 4 stripes : the Chief of Naval Staff ; the Chief of the Italian NATO Naval Zone ; the Commander in Chief, Naval Forces.

There is also the lesser rank of *Allievo dell' Accademia Navale* (Naval Cadet).

Other branches distinguished by following colours :

*Genio Navale* (Naval Constructors and Engineer Officers),  
*Armi Navali* (Ordnance, Electrical and Electronics Constructors),  
*Sanitario* (Medical Officers),  
*Commissariato* (Supply Officers),  
*Farmacisti* (Chemists),  
*Capitanerie di Porto* (Harbour Masters),

dark purple.  
yellow-brown.  
blue.  
red.  
green.  
grey-green.

A five-pointed silver star (or gold in the case of flag officers) is worn on lapel of coat. All officers under arms on duty wear a blue sash over right shoulder, ending in a blue knot at left hip ; worn with belt. Officers on staff duty wear it on opposite shoulder, with or without belt. Tropical white tunic has insignia of rank on shoulder straps. Senior lieutenants wear a piece of gold under the stars of their shoulder straps.

## Personnel.

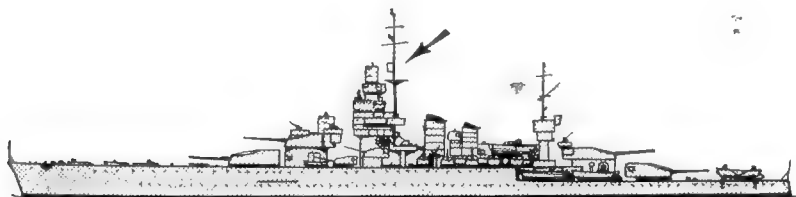
35,000 officers and ratings, increasing to 38,000 officers and ratings.

## Five Year Programme.

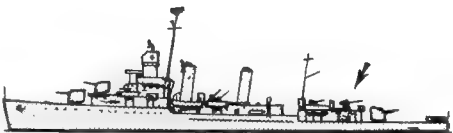
A five-year programme of construction carried out from Jan. 1, 1950, when the ban on new warships imposed by the Italian Peace Treaty expired, provides for the complete rebuilding of two large destroyers (former light cruisers) with special anti-aircraft installations, two new destroyers equipped with anti-aircraft and anti-submarine weapons, three new frigates (escort vessels) one of them to the order of NATO but allocated to Italy, several submarines, three of the 8 NATO new corvettes building in Italy, seven coastal minesweepers and other lesser craft and many minor units.

## Mercantile Marine.

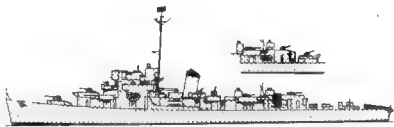
Lloyd's Register appendix, 1954 : 1,123 vessels of 3,456,200 tons gross.



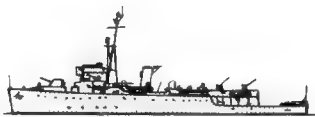
ANDREA DORIA, CAIO DUILIO without crow's-nest on foremast.



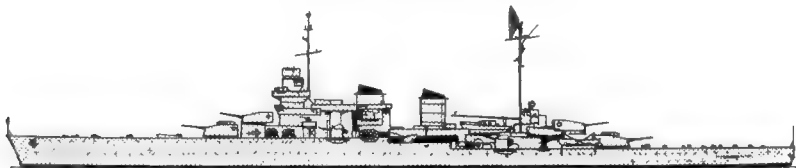
AVIERE.



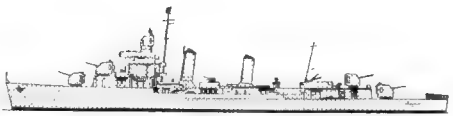
ALTAIR Class.  
(Inset ALDEBARAN).



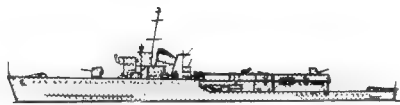
ALABARDA



GIUSEPPE GARIBALDI.



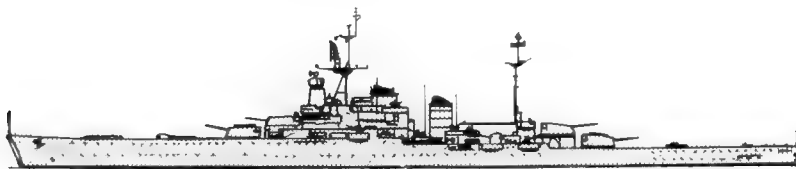
ARTIGLIERE.



ORIONE, ORSA.



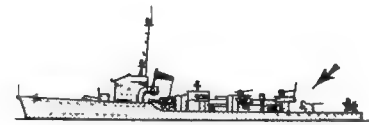
BOMBARDA



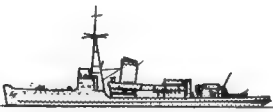
LUIGI DI SAVOIA DUCA DEGLI ABRUZZI.



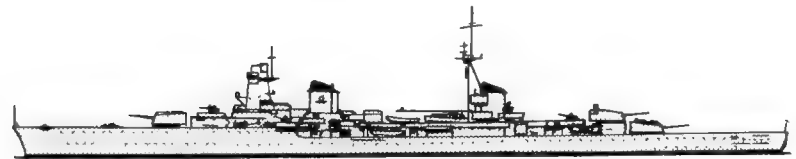
GRANATIERE.



CLIO.



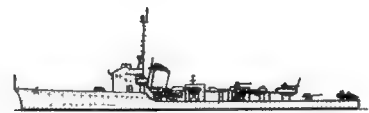
ANTILOPE Class.



RAIMONDO MONTECUCCOLI



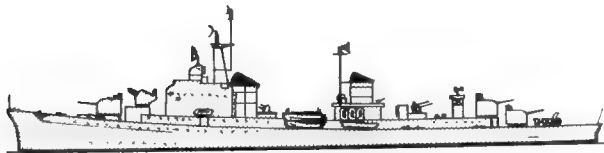
CARABINIERE.



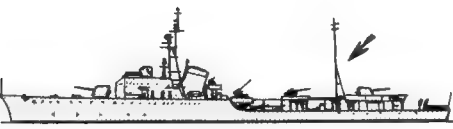
SIRIO.



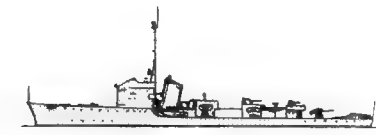
GIUSEPPE ABBA Class.



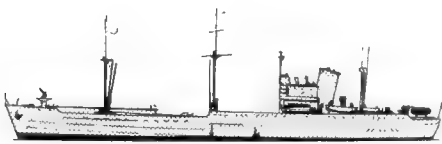
SAN GIORGIO, SAN MARCO.



GRECALE.



CASSIOPEA.



STROMBOLI.



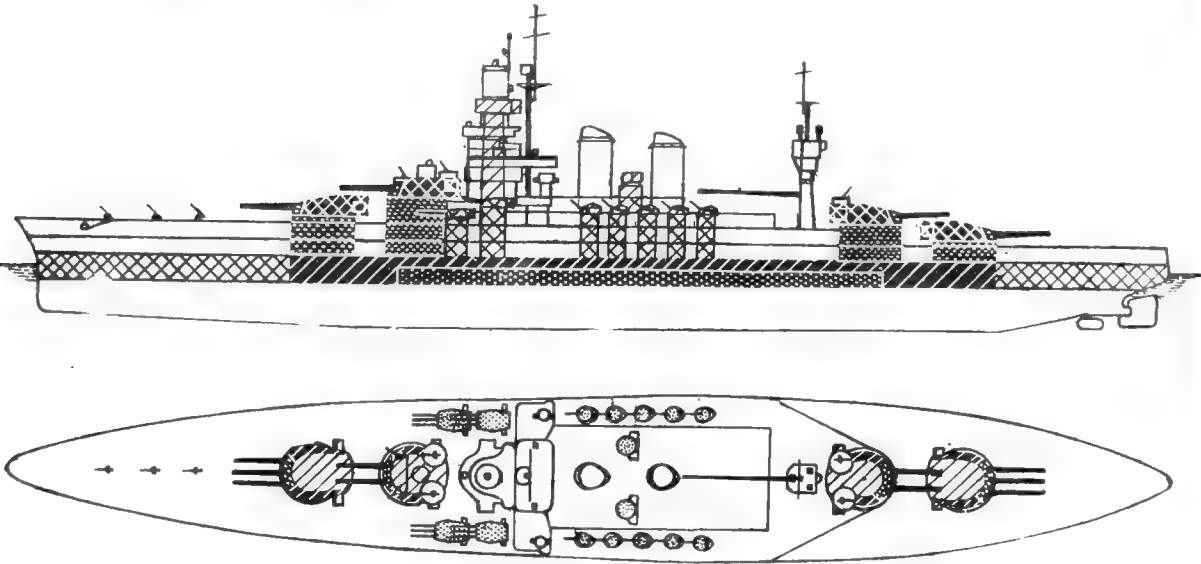
Battleships

2 “Doria” Class.

ANDREA DORIA

CAIO DUILIO

Displacement : 23,622 tons *standard* (28,882 tons *full load*)  
Dimensions : Length : 597 (w.l.), 611½ (o.a.) feet. Beam : 92 feet. Draught : 30 feet (*mean*)  
Guns : 10—12.6 inch, 44 cal., 12—5.3 inch, 45 cal., 10—3.5 inch AA., 50 cal., 19—37 mm., 12—20 mm.  
Armour : 9½”-8” Belt (amidships), 5” Belt (ends), 9½” Barbettes, 11” Turret to these, 11” C.T. fore)  
Machinery : Belluzzo geared turbines. 2 shafts. S.H.P. : 75,000 = 27 kts. on recent sea trials.  
Boilers : 8, of 3-drum type (working pressure reported to be 500 lb per sq. inch)  
Oil fuel : 2,000 tons  
Complement : 1,198



**General Notes.**—Rebuilt 1937-40. These ships were originally of entirely different appearance, with a main armament of 13—12 inch guns, in 3 triple and 2 double turrets, and a secondary battery of 6-inch guns. Both *Caio Duilio* and *Andrea Doria* now have one P.P.I. radar set and some other radar AA. sets. Both in Reserve. *Andrea Doria* laid up June 1953. Reported that *Caio Duilio* will probably be scrapped in 1954 or 1955.

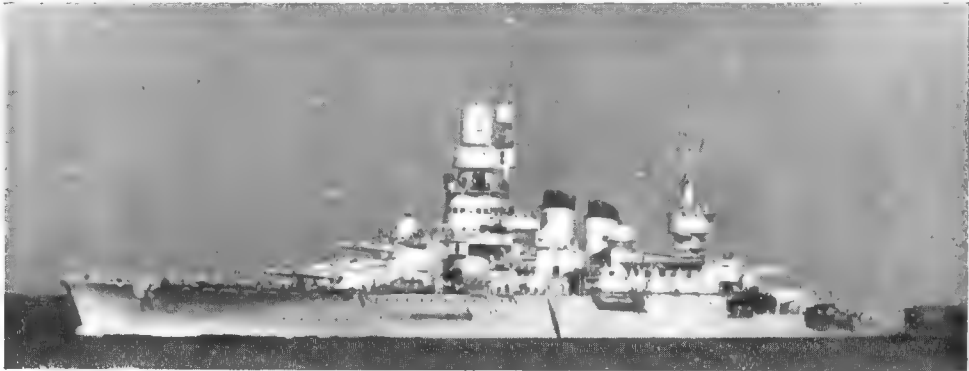
**Gunnery Notes.**—12.6-inch guns are a Terni model, reported to have given remarkably successful results in proof tests. They are 43-8 calibres in length. *Caio Duilio* has director equipment of San Giorgio type.

**Armour Note.**—As reconstructed protection is improved over magazines, machinery and boiler spaces.



CAIO DUILIO

Added 1953, Italian Navy, Official.



ANDREA DORIA.

Added 1952, Lieut. Aldo Fraccaroli.



ANDREA DORIA.

1951, A. & J. Pavia

No.	Name	Builders	Machinery	Laid down	Launched	Completed	Rebuilt by
B 51	Andrea Doria	Spezia	Ansaldo	24 Mar. 1912	30 Mar. 1913	Mar. 1916	C. R. dell' Adriatico
B 50	Caio Duilio	Castellammare	Ansaldo	25 April 1912	24 April 1913	May 1915	C. Nav. del Tirreno

Cruisers.

2 “Garibaldi” Class.



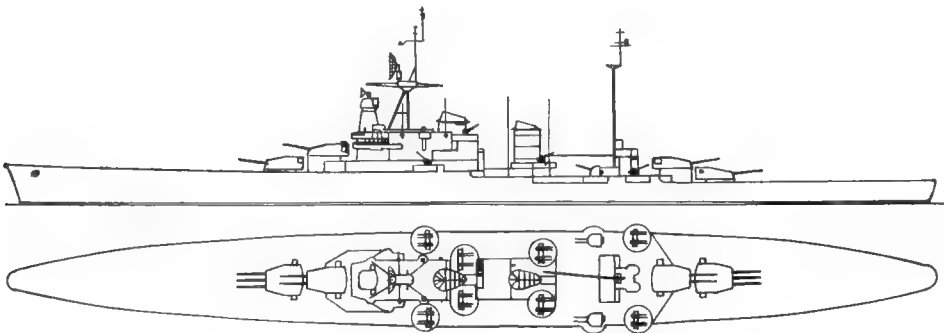
GIUSEPPE GARIBALDI

1954, Lieut. Aldo Fraccaroli.

GIUSEPPE GARIBALDI

LUIGI DI SAVOIA DUCA DEGLI ABRUZZI

Displacement : 9,802 tons standard (11,590 tons full load, *Garibaldi* 11,034 tons)  
Dimensions : Length : 593 (w.l.), 613½ (o.a.) feet. Beam : 61 feet. Draught : 17 feet (mean)  
Guns : *Garibaldi* : 10—6 inch, 55 cal., 10—3·9 inch, 47 cal., 12—37 mm. AA., 54 cal., 10—20 mm. AA., 65 cal., 3—8 mm. AA., 2 D.C.T.  
*Duca degli Abruzzi* : 10—6 inch, 55 cal., 4—3·9 inch (100 mm. lighting guns), 47 cal., 24—40 mm. 56 cal. Bofors AA., 4 D.C.T.  
Armour : 4½”-1½” Vertical Side, 2½” Deck, 4” Turrets, 5” C.T.  
Machinery : Parsons geared turbines. 2 shafts. Designed S.H.P. : 100,000 = 35 kts. (designed)  
Boilers : 8, of 3-drum type  
Oil fuel : 1,680 tons  
Complement : 600

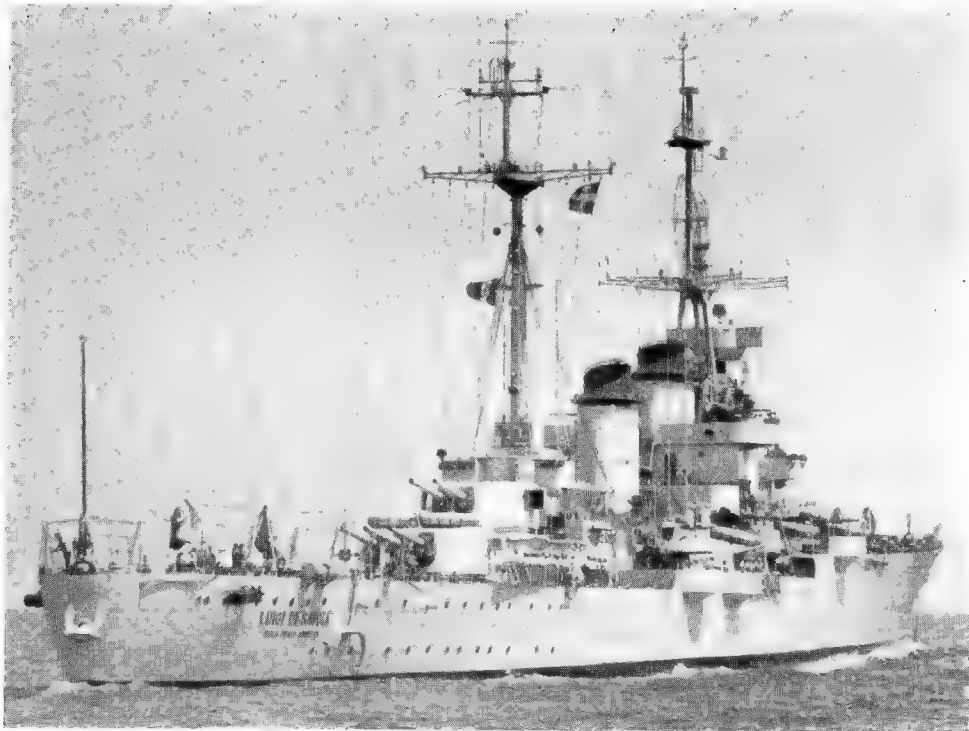


Note to Plan.—Represents *Duca degli Abruzzi*. Now have neither torpedo tubes nor catapults. Only in *Garibaldi* are the 3·9 inch (100 mm. 47 cal.) AA. guns for anti-aircraft fire.

General Notes.—These ships represent the ultimate expansion of the original “Condottieri” design. The 6-inch guns are a new model more powerful than the 53 cal. weapons with which previous cruisers have been armed. On first trials, *Giuseppe Garibaldi* exceeded 33·6 kts. with 104,030 S.H.P. Actual speed does not now exceed 31 kts. in both ships. They are equipped for mine-laying.

Reconstruction Notes.—Both of these cruisers rebuilt under the new five-year naval programme. Very different conning tower with small lattice mast and radar aerials, mainmast shortened to the top on which are radar sets one of which has large antennae similar to American type. The armament is now undergoing modernization. *Garibaldi* completed 16 months refit at La Spezia Navy Yard in Jan. 1951. *Duca degli Abruzzi* completed 27 months refit at La Spezia Navy Yard in June 1953.

No.	Name	Builders	Laid down	Launched	Completed
C 551	<i>Giuseppe Garibaldi</i>	C.R. dell' Adriatico	Dec. 1933	21 Apr. 1936	1937
C 550	<i>Luigi di Savoia Duca degli Abruzzi</i>	Odero-Terni-Orlando	Dec. 1933	21 Apr. 1936	1937



LUIGI DI SAVOIA DUCA DEGLI ABRUZZI.

1954, Lieut. Aldo Fraccaroli.



LUIGI DI SAVOIA DUCA DEGLI ABRUZZI.

1954, courtesy Dott. Ing. L. Accorsi

## Cruiser.



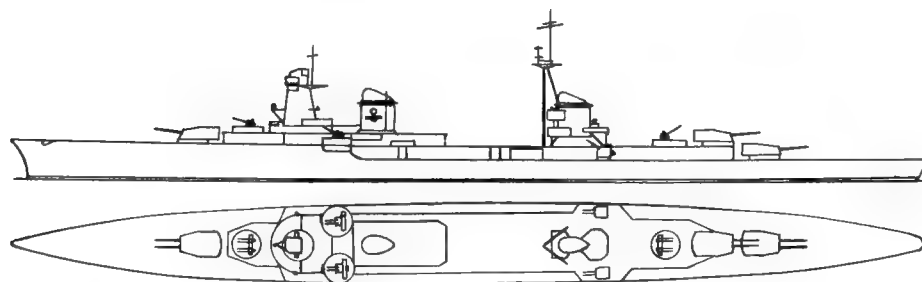
RAIMONDO MONTECUCCOLI.

Added 1953, Lieut. A. W. Sugden, R.N.

## RAIMONDO MONTECUCCOLI

Builders : Ansaldo, Sestri Ponente  
Laid down : Oct., 1931  
Launched : Aug. 2, 1934  
Completed : July, 1935

Displacement : 6,941 tons standard (9,348 tons full load)  
Dimensions : Length : 575½ (pp.), 577 (w.l.), 597½ (o.a.) feet. Beam : 54½ feet. Draught : 14½ feet (mean)  
Guns : 6—6 inch, 53 cal., 4—3.9 inch, 47 cal. AA., 8—40 mm. 56 cal. AA., 4—20 mm. 70 cal. AA., 2 D.C.T.  
Mines : Can carry 66 to 112  
Armour : Thin plating only on turrets and decks but side armour decidedly thicker at waterline  
Machinery : Belluzzo geared turbines. 2 shafts. Boilers : 6, of 3-drum type. S.H.P. : 106,000 = 34 kts.  
Oil fuel : 1,200 tons  
Complement : 522



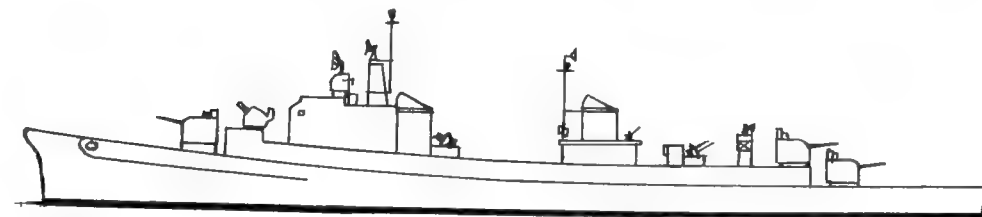
Note to Plan.—"B" turret, "Q" 3.9 inch mounting, and torpedo tubes removed. Now has an AA. radar set on mainmast.

Notes.—*Raimondo Montecuccoli* was begun under the 1930 Programme, but construction was held up pending alterations to plans. Commissioned in July, 1935, she made 39.5 kts. on trials, without stores or ammunition on board. Equipped for minelaying. Used as training ship for midshipmen in summer 1949. Under conversion. Will retain only six of her original 8—6 inch guns ("B" turret removed) and only 4 of her 3.9 inch guns (centre-line mounting removed) and 8 40 mm. Bofors AA. guns added. Pendant No. C 552.

The future of sister ship, *Muzio Attendolo* is uncertain. She was sunk by bombing at Naples in Dec. 1942, has been refloated and was to have been reconstructed and rearmed as an anti-aircraft cruiser.

## Destroyer Leaders (ex-Light Cruisers).

2 "San Giorgio" Class (officially rated as *Cacciatorpediniere di Squadra*).



SAN GIORGIO (ex-Pompeo Magno)

SAN MARCO (ex-Giulio Germanico)

Displacement : 3,500 tons standard (5,300 tons full load)  
Dimensions : 455 × 47½ × 16½ feet  
Guns : 6—5 inch, 38 cal. ; 20—40 mm., 56 cal. AA.  
A/S weapons : Bow A/S weapon. Depth charges  
Machinery : Geared steam turbines. 2 shafts. S.H.P. : 110,000 = 41 kts. Sea speed 36 kts.  
Boilers : 4

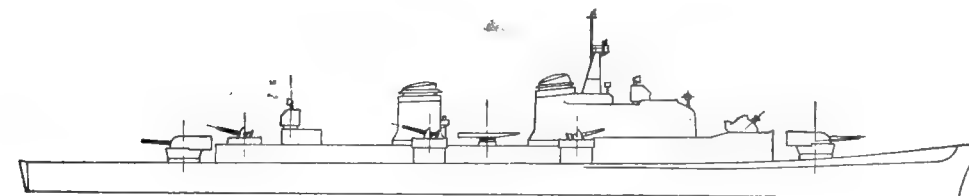
Notes.—These two vessels were originally built as light cruisers of the "Attilio Regolo" or Roman Captains (*Capitani Romani*) class. *Giulio Germanico* was sunk by the Germans on Sept. 1943 before she was completed, but was refloated in 1947. Both ships now undergoing conversion into anti-aircraft and anti-submarine destroyers or fast frigates (squadron leaders) by Cantieri del Tirreno Genova, and Navalmeccanica Castellammare di Stabia. Sister ships of *Chateaurenault* (ex-*Attilio Regolo*) and *Guichen* (ex-*Scipione Africano*) converted into *Escorteurs Rapides* for the French Navy.

Pendant Nos.	Name	Builders	Laid down	Launched	Completed*
D 562	<i>San Giorgio</i>	C.N.R. Ancona	23 Sep., 1939	28 Aug., 1941	24 Jun., 1943
D 563	<i>San Marco</i>	Navalmeccanica Castellammare di Stabia	11 May, 1940	20 Jul., 1941	See Notes.

\* Conversion to be completed Autumn 1955.

## Large Destroyers (New Construction).

2 "Impetuoso" Class.



IMPETUOSO

INDOMITO

Displacement : 2,775 tons standard (3,592 tons full load)  
Dimensions : 404½ × 42½ × 14 feet  
Guns : 4—5 inch, 38 cal. AA., 16—40 mm. 56 cal. Bofors AA.  
Tubes : 2—21 inch.  
A/S weapons : Bow A/S weapon. Depth charges  
Machinery : Geared Turbines 2 shafts. S.H.P. : 65,000 = 34 kts.  
Boilers : 4

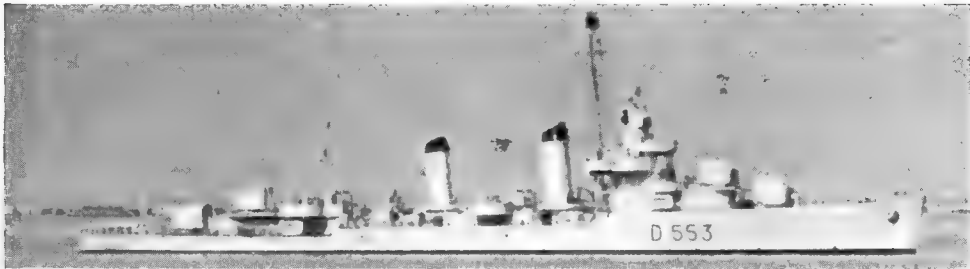
Notes.—Large destroyers with special anti-submarine and heavy anti-aircraft armament. Appearance will be somewhat different from that shown in official drawing above, particularly with regard to the funnels. One of these ships was to have been named *Impavido*.

Pendant Nos.	Name	Builders	Ordered	Laid down
D 558	<i>Impetuoso</i>	Cantieri del Tirreno, Riva Trigoso	Nov., 1950	7 May, 1952
D 559	<i>Indomito</i>	Ansaldo, Leghorn (formerly O.T.O. Yard)	Nov., 1950	24 April, 1952

ITALY—Destroyers and Fast Escorts

Destroyers.

2 “Artigliere” Class.



ARTIGLIERE. 1954, Lieut. Aldo Fraccaroli.

ARTIGLIERE (ex-U.S.S. Woodworth, DD 460)

- Displacement : 1,620 tons (2,450 tons full load)
- Dimensions : 348½ (o.a.) × 35½ × 18 (max.) feet
- Guns : 4—5 inch, 38 cal., 12—40 mm. 56 cal., 6—20 mm., 70 cal.
- Torpedo tubes : Removed
- A/S weapons : 4 D.C. Throwers
- Machinery : Geared turbines. 2 shafts. S.H.P. : 50,000 — 37 kts. (Sea speed 31 kts.)
- Boilers : 4 high pressure
- Complement : 200



AVIERE. 1954, Lieut. Aldo Fraccaroli.

AVIERE (ex-U.S.S. Nicholson, DD 442)

- Displacement : 1,630 tons (2,450 tons full load)
- Dimensions : 341 (w.l.), 349½ (o.a.) × 36 × 10 (18 max.) feet
- Guns : 4—5 inch, 38 cal., 12—40 mm. Bofors, 6—20 mm. Oerlikon
- Torpedo tubes : Removed
- A/S weapons : 4 D.C.T.
- Machinery : General Electric geared turbines. 2 shafts. S.H.P. : 50,000 = 37 kts. (Sea speed 31 kts.)
- Boilers : 4 Babcock & Wilcox.
- Complement : 250 (war)

General Notes.—Both transferred from the United States Navy under the Mutual Defense Assistance Program and commissioned 25 May, 1951. Officially turned over to Italy, 11 June, 1951.

Appearance Notes.—Artigliere has flat sided funnels and shielded “X” 5-inch mounting but Aviere has round funnels and no shield to “X” gun, and has extra tier on bridge, see photos.

Pendant Nos.	Name	Builders	Laid down	Launched	Completed
D 553	Artigliere	Bethlehem, San Francisco	13 Jan., 1941	29 Nov., 1941	30 Apr. 1942
D 554	Aviere	Boston Navy Yard	1 Nov. 1941	31 May, 1942	June 1941

Fast Anti-Submarine Escorts (Converted Destroyers).

2 “Granatiere” Class (officially rated as Cacciatorpediniere di Scorta.)



GRANATIERE. 1954, A. & J. Pavia.

- CARABINIERE**

  - Displacement : 1,830 tons standard (2,479 tons full load)
  - Dimensions : 339 (w.l.), 350 (o.a.) × 33½ × 10½ feet (mean)
  - Guns : 3—4.7 inch, 50 cal., 6—40 mm. AA., 56 cal., 2—20mm. AA., 65 cal.
  - Tubes : 3—21 inch (tripled)
  - Machinery : 2 sets Belluzzo geared turbines. 2 shafts. S.H.P. : 48,000 = 38 kts. (31 kts. sea speed)
  - Boilers : 3, of 3-drum type
  - Oil fuel : 545 tons
  - Complement : 189
- GRANATIERE**

  - Displacement : 1,830 tons standard (2,479 tons full load)
  - Dimensions : 339 (w.l.), 350 (o.a.) × 33½ × 10½ feet (mean)
  - Guns : 3—4.7 inch, 50 cal., 6—40 mm. AA., 56 cal., 2—20mm. AA., 65 cal.
  - Tubes : 3—21 inch (tripled)
  - Machinery : 2 sets Belluzzo geared turbines. 2 shafts. S.H.P. : 48,000 = 38 kts. (31 kts. sea speed)
  - Boilers : 3, of 3-drum type
  - Oil fuel : 545 tons
  - Complement : 189
- Notes.—Both modernised and converted to Submarine Killer with new type hedgehog forward for trials 1953-54. 1—4.7 inch gun on forecastle, twin 4.7 inch mounting aft, 6—40 mm., 56 cal. guns in twin mountings (same armament as Grecale).

1 “Grecale” Class.



1954, Italian Navy, Official.

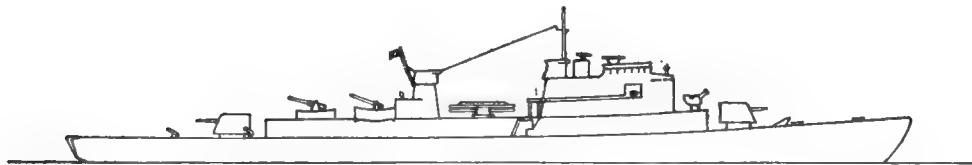
- GRECALE**
- Displacement : 1,641 tons standard (2,361 tons full load)
  - Dimensions : 333½ (w.l.), 350 (o.a.) × 33½ × 10 feet
  - Guns : 3—4.7 inch, 50 cal., 6—40 mm. 56 cal., 2—20 mm. 65 cal. M.G
  - A/S weapons : 4 D.C. Throwers
  - Mines : Can carry 36 to 64
  - Machinery : 2 sets Parsons geared turbines. 2 shafts. S.H.P. 44,000 = 33 kts. (31 kts. actual sea speed)
  - Boilers : 3, of 3-drum type
  - Oil fuel : 520 tons
  - Complement : 153

Notes.—Built under 1930 Programme. Fitted for minelaying. Reconstructed in 1949 with new lattice mast, several new radar sets, and British type navigating bridge, and re-converted to an anti-submarine escort, 1952-53. New type hedgehog forward experimentally

Pendant Nos.	Name	Builders	Laid down	Launched	Completed
D 551	Carabiniere	Cantieri del Tirreno, Riva Trigoso	Feb., 1937	24 Jul., 1938	Dec., 1939
D 550	Granatiere	C.N.Riuniti, Palermo	Apr., 1937	24 Apr., 1938	Feb., 1939
D 552	Grecale	C.N.Riuniti, Ancona	Apr., 1931	17 June 1934	Nov., 1934

Frigates.

3 New Construction. Rated as Escort Destroyers (*Avvisi Scorta*)



ANOPO

CENTAURO

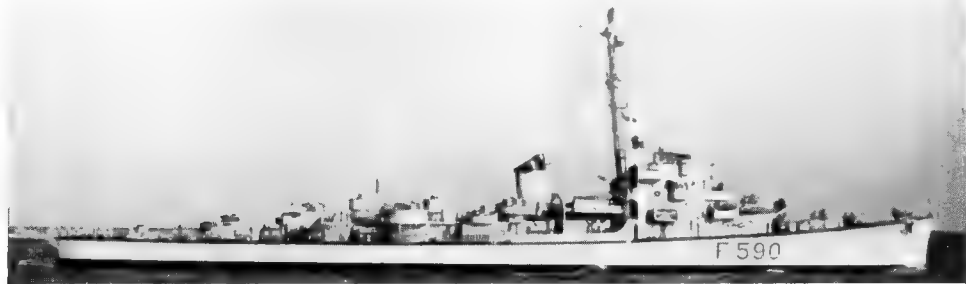
CIGNO

Displacement : 1,500 tons standard (1,925 tons full load)  
Dimensions : 317½ × 38 × 11½ feet  
Guns : 4—3 inch, 62 cal. AA. ; 4—40 mm. 70 cal. Bofors AA.  
Tubes : 2—21 inch  
A/S weapons : Bow A/S weapon. Depth charges  
Machinery : Geared steam turbines 2 shafts. S.H.P. : 22,000 = 26 kts.

Notes.—Appearance will be somewhat different from that shown in official drawing above, particularly with regard to the funnels  
One ordered Nov. 1950. Special A/S and medium AA. armament. Third ship is being built to the order of NATO for the Italian Navy.

Pendant No.	Name	Builders	Laid down	Launched	Completed
D 570	Canopo	Cantieri Navali di Taranto	15 May 1952		Autumn 1954
D 571	Centauro	Ansaldo, Leghorn	31 May 1952	4 Apr. 1954	Late 1954
	Cigno	Cantieri Navali di Taranto			

3 “Altair” Class. Rated as Escort Vessels (*Avvisi Scorta*.)



ALDEBARAN.

1953, A. & J. Pavia.

ALDEBARAN (ex-Thornhill)

ALTAIR (ex-Gandy)

ANDROMEDA (ex-Wesson)

Displacement : 1,240 tons (1,900 tons full load)  
Dimensions : 306 (o.a.) × 36 × 12 (max.) feet  
Guns : 3—3 inch, 50 cal., 6—40 mm. Bofors AA., 18—20 mm. AA.  
A/S weapons : 1 Hedgehog, 8 D.C.T.  
Machinery : Diesel-electric, 2 shafts. B.H.P. : 6,000 = 21 kts. designed (17 kts. max. sea speed)  
Complement : 160

Notes.—These vessels were ceded by the United States under the Mutual Defense Assistance Program. Transferred 10 Jan., 1951.

Pendant Nos.	Name	Builders	Launched	Completed
F 590	Aldebaran	Federal S.B. & D.D. Co., Port Newark	30 Dec., 1943	1 Feb., 1944
F 591	Altair	Tampa S.B. Co.	12 Dec., 1943	7 Feb., 1944
F 592	Andromeda	Federal S.B. & D.D. Co., Port Newark	17 Oct., 1943	11 Nov., 1943

Frigates

4 “Libra” Class.



CALLIOPE.

1954, courtesy B. R. Bezance, Esq.



CLIO

1953, A. & J. Pavia.

ARETUSA

CALLIOPE

CLIO

LIBRA

Displacement : 1,030 tons standard (1,250 tons full load)  
Dimensions : 259½ (w.b.), 280½ (o.a.) × 27 × 9 (mean) feet  
Guns : 1—3.9 inch, 47 cal., 4—40 mm., 56 cal.  
Tubes : Removed  
A/S weapons : 1 Hedgehog, 2 D.C. Throwers  
Machinery : 2 sets Tosi geared turbines. 2 shafts. S.H.P. : 19,000 = 34 kts. Actual best speed : 30 kts.  
Boilers : 2, of 3-drum type  
Oil fuel : 207 tons  
Complement : 110 (peacetime), 159 wartime.

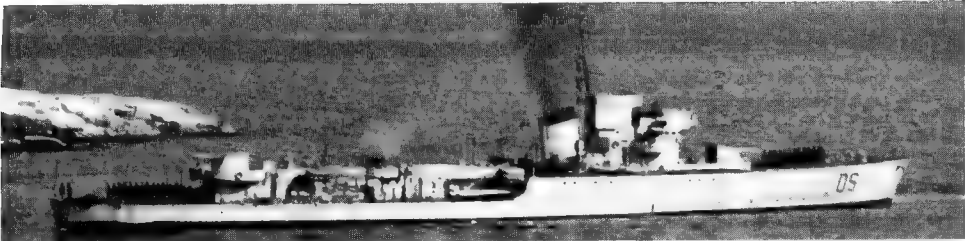
Notes.—Fitted for minelaying. Former oceangoing torpedo boats. Converted to fast light A/S frigates 1951-53.

Pendant Nos.	Name	Builders	Laid down	Launched	Completed
F 556	Aretusa	Ansaldo, S.P.	Oct., 1936	6 Feb., 1938	May., 1938
F 551	Calliope	Ansaldo, S.P.	May, 1937	15 Apr., 1938	Nov., 1938
F 555	Clío	Ansaldo, S.P.	Dec., 1936	3 Apr., 1938	Oct., 1938
F 552	Libra	C.N.Q. Fiume	Dec., 1936	30 Oct., 1937	Jan., 1938



ITALY—Frigates, Submarines

Frigates—continued.  
2 “Orsa” Class.



ORSA. (before conversion).

1952, A. & J. Pavia.

ORIONE		ORSA	
Displacement :	1,168 tons standard (1,698 tons full load)		
Dimensions :	274½ (pp.), 279 (w.l.), 292½ (o.a.) × 31 × 11½ (max.), 8 (mean) feet		
Guns :	1—3.9 inch, 47 cal., 4—40 mm. 56 cal. Bofors AA.		
Tubes :	Removed		
A/S weapons :	1 Hedgehog, 2 D.C.T.		
Mines :	Can carry 20		
Machinery :	Tosi geared turbines. 2 shafts. S.H.P. : 16,000 = 28 kts. (actual sea speed 25 kts. max.)		
Boilers :	2, of 3 drum type		
Oil fuel :	450 tons		
Complement :	160		

General Notes—Ordered 1935. Fitted for minelaying. Were rated as Escort Vessels (Avvisi Scorta) when first completed, later as torpedo boats, and re-rated as Escort Vessels again in 1951. Under conversion 1953-54, embodying experience of “Libra” class.

Class Note.—Sister Procione, launched 1 Jan., 1937 and scuttled at La Spezia, 9 Sep., 1943, to avoid capture by Germans, is refloated.

Pendant Nos.	Name	Builders	Laid down	Launched	Completed
F 559	Orione	C.N.R., Palermo	Early 1936	21 Mar., 1937	1938
F 558	Orsa	C.N.R., Palermo	Early 1936	21 Apr., 1937	1938

3 “Sirio” Class



SIRIO.

1954, Lieut. Aldo Fraccaroli.

CASSIOPEA		SAGITTARIO		SIRIO	
Displacement :	1,000 tons standard (1,200 tons full load),				
Dimensions :	269 × 27 × 9 feet				
Guns :	1—3.9 inch, 47 cal., 4—40 mm. AA. 56 cal. (see notes)				
Tubes :	2—17.7 inch in Sagittario only. Removed in others				
A/S weapons :	1 Hedgehog, 2 D.C. Throwers				
Machinery :	2 Tosi geared turbines. 2 shafts. S.H.P. : 19,000 = 34 kts. (actual sea speed 30 kts.)				
Boilers :	2, of 3-drum type				
Oil fuel :	193 to 211 tons				
Complement :	110 (peacetime)				

Notes.—Fitted for minelaying. Fast corvette type converted 1951-52. Formerly rated as torpedo boats. 2 more ships of this type, Remus and Romulus, were sold to Sweden in 1940. Sagittario has 2—3.9 inch and one experimental A/S rocket projector forward.

Pendant Nos.	Name	Builders	Laid down	Launched	Completed
F 553	Cassiopea	C. Tirreno, Riva Trigoso	Dec., 1935	22 Nov., 1936	Apr., 1937
F 557	Sagittario	C.N.Q. Fiume	Nov., 1935	21 Jun., 1936	Oct., 1936
F 554	Sirio	C.N.Q. Fiume	Nov., 1934	16 Nov., 1935	Feb., 1936

Submarines.

2 Ex-U.S. “Gato” Class. Ocean-going Type.

LEONARDO DA VINCI (ex-Barb)		ENRICO TAZZOLI (ex-Dace)	
Displacement :	1,525 tons surface (2,452 tons submerged)		
Dimensions :	311½ × 27 × 17 feet		
Tubes :	10—21 inch (6 bow, 4 stern)		
Machinery :	G.M. 2-stroke Diesels. B.H.P. : 6,500 = 21 kts. surface. Electric motors. H.P. : 2,750 = 15 kts. submerged		

Notes.—Lent to Italy by U.S.A. after conversion to guppy snorkel in 1953-54. Modified structure and fairwater.

Name	Builders	Laid down	Launched	Completed
Leonardo da Vinci	Electric Boat Co.	7 June 1941	2 Apr. 1942	8 July 1942
Enrico Tazzoli	Electric Boat Co.	22 July 1942	25 Apr. 1943	23 July 1943



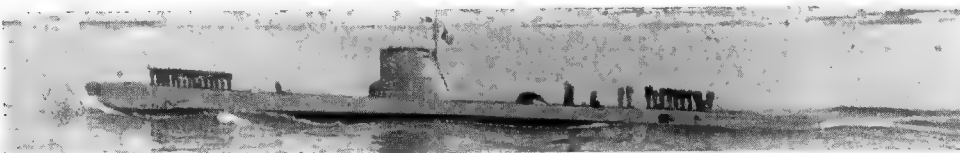
VORTICE.

1954, Italian Navy, Official.

BARIO (ex-Uit 7)		VORTICE (ex-P.V.2, ex-Vortice)	
Displacement :	750 tons standard, 905 tons surface, 1,095 tons submerged		
Dimensions :	207½ × 22½ × 16 feet		
Guns :	Removed		
Tubes :	6—21 inch		
Machinery :	FIAT Diesel. 2 shafts. B.H.P. : 2,400 = 15 kts. surface, H.P. : 1,350 = 7 kts. submerged		
Radius :	12,500 miles at 8½ kts.		
Complement :	52		

Notes.—Vortice is one of 8 boats of the “Flutto” Class which joined the Royal Italian Navy during the war. Laid up under the terms of the Peace Treaty. Reconditioning completed end of 1952. Bario was sunk by Allied air-raid 16 March 1945 after having been renamed Uit 7. Reconditioned 1953-54. Anticipated date of entry into service : 1955.

Pendant No.	Name	Builders	Laid down	Launched	Completed
S 502	Bario	C.R.D.A. Monfalcone	15 Mar. 1943	23 Jan. 1944	
	Vortice	C.R.D.A. Monfalcone	3 Jan. 1942	23 Feb. 1943	21 June 1943



GIADA.

1954, Italian Navy, Official.

GIADA (ex-P.V.1, ex-Giada)	
Builders :	C.R.D.A. Monfalcone
Laid down :	16 Oct., 1940
Launched :	10 July, 1941
Completed :	6 Dec., 1941 (Reconditioned Dec., 1952)
Displacement :	643 tons standard, 701 tons surface, 865 tons submerged
Dimensions :	197½ × 21½ × 15½ feet
Guns :	Removed
Tubes :	6—21 inch
Machinery :	2 Tosi Diesels. 2 shafts. B.H.P. : 1,350 = 14.7 kts. surface, Electric motors, H.P. : 800 = 7.9 kts. submerged
Complement :	54

Notes.—One of the 13 “Acciaio” Class boats which actually joined the Royal Italian Navy during the war. Laid up under the terms of the Peace Treaty. Reconditioning completed end of 1952. Pendant No. S 501.

Corvettes.

22 "Ape" Class.



FARFALLA. 1954, Ing. L. Accorsi.



FENICE. 1954, Lieut. Aldo Fraccaroli.

F 567 *APE	F 575 CORMORANO	F 548 *FARFALLA	F 571 *GABBIANO	F 573 POMONA
F 578 BAIONETTA	F 547 CRISALIDE	F 577 *FENICE	F 566 *GRU	F 564 *SCIMITARRA
F 549 BOMBARDA	F 563 *DANAIDE	F 572 *FLORA	F 561 *IBIS	F 579 *SFINGE
F 569 *CHIMERA	F 568 *DRIADE	F 576 FOLAGA	F 562 MINERVA	F 565 SIBILLA
			F 574 PELLICANO	F 570 *URANIA

Displacement : 515 to 642 tons (738 tons full load)  
 Dimensions : 192½ (w.l.), 203 (o.a.) × 28½ × 8½ feet  
 Guns : 1—3.9 inch, 47 cal. forward, 2—40 mm., 56 cal. aft, 2 or 3—20 mm. AA., 70 cal. forward.  
 Tubes : 2—17.7 inch (see notes) 4 D.C.T.  
 Machinery : Fiat Diesels, 2 shafts. B.H.P. : 3,500 = 18.5 kts. Actual best speed is 15.5 to 17 kts.

Notes.—All launched 1942-48. Fitted for minesweeping. Only vessels attached to the Command Training School (\*) carry torpedo tubes. Eleven of this class will have the 3.9 inch gun replaced by a hedgehog. Some have depth-charge equipment at stern. All are being modified with navigating bridge.

Corvettes—continued.

3 New Construction.

Displacement : 566 tons standard (870 tons full load)  
 Dimensions : 244 × 31 × 9 feet  
 Machinery : Speed : 20 kts.

Notes.—Three building in Italy to complete 1954 have been transferred to Italy. Five others building in Italian yards to the order of the United States for Mutual Defense Program general account also to complete 1954, three for Netherlands, two for Denmark.



ALABARDA (ex-Eritrea, ex-Larne) 1954, Lieut. Aldo Fraccaroli.

Launched : 2 Sept., 1943  
 Displacement : 1,262 tons  
 Dimensions : 235 (o.a.) × 35½ × 11½ (max.) feet  
 Guns : 1—3.9 inch (100 mm., 47 cal.), 4—37 mm. 54 cal  
 A. S. weapons : 4 D.C.T.

Notes.—Former British "Algerine" class ocean minesweepers. First classed as colonial sloop, then rated as corvette, now as frigate. Pendant No. F 560.



ANTILOPE 1953, Official.

<b>ANTILOPE (ex-B1)</b>	<b>DAINO (ex-B 2)</b>	<b>GAZZELLA (ex-B 3)</b>
Displacement : 535 tons standard (740 tons full load)		
Dimensions : 203½ (pp.), 219½ (o.a.) × 27½ × 8½ feet		
Guns : 3—40 mm. AA., 56 cal.		
A. S. weapons : 1 Hedgehog, 2 D.C.T. in Daino only		
Machinery : Triple expansion. 2 shafts. I.H.P. : 2,150 = 17 kts.		
Boilers : 2 Schulz-Marine		
Coal : 142 tons		

Notes.—Ex-German coal-burning minesweepers. Acquired July 20, 1949 when they were classed as "Navi Ausiliarie" (Auxiliary Ships but subsequently converted to burn oil fuel and classed as "Navi Pattuglia" (Patrol Ships). NATO numbers painted on bows : Antilope, M 5337 ; Daino, M 5339 ; Gazzella, M 5342. Reclassified as minesweepers 1954.

ITALY—Minesweepers

Fast Minesweepers (Ex-Oceangoing Torpedo Boats).

GIACINTO CARINI	NICOLA FABRIZI
Displacement :	645 tons (885 tons full load)
Dimensions :	238 (pp.), $24 \times 9\frac{1}{2}$ (mean) feet
Guns :	2—4 inch, 2—20 mm., 70 cal. (Nicola Fabrizi disarmed except for forecastle guns)
Machinery :	2 sets Tosi turbines. 2 shafts. S.H.P. : 15,500 = 30 kts. (sea speed 27 kts.)
Boilers :	4 Thornycroft
Oil fuel :	150 tons
Complement :	100

Notes.—Both built by Odero. Launched 1917 and 1918 respectively. Converted from torpedo boats to fast minesweepers 1952-54. Pendant Nos. M 5331 and M 5333 respectively.



GIUSEPPE ABBA. 1954, Lieut. Aldo Fraccaroli.

ANTONIO MOSTO	GIUSEPPE ABBA	ROSOLINO PILO
Displacement :	615 tons (885 tons full load)	
Dimensions :	236½ (pp.) $\times 24 \times 8\frac{1}{2}$ (mean) feet	
Guns :	1—4 inch, 2 to 4—20 mm. AA.	
Machinery :	2 sets Tosi turbines. 2 shafts. S.H.P. : 14,500 = 30 kts. (sea speed 27 kts.)	
Boilers :	4 Thornycroft	
Oil fuel :	150 tons	
Complement :	94	

Notes.—Antonio Mosto built by Pattison, others by Odero, S.P. All launched 1915. Converted from torpedo boats to fast minesweepers 1954. Pendant Nos. M 5335, M 5330, M 5336.

Trawler Minesweepers (Dragamine).

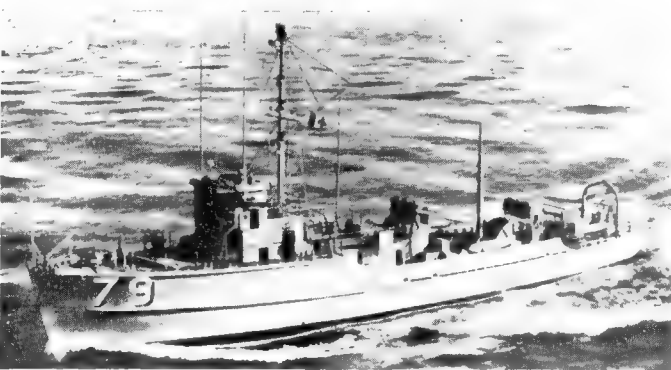


DR 301	DR 306	DR 311
(ex-Burra)	(ex-Egilsay)	(ex-Mousa)
DR 302 (ex-Cumbræ)	DR 307 (ex-Minuet)	DR 312 (ex-Gavotte)
DR 303 (ex-Unst)	DR 308 (ex-Twostep)	DR 313 (ex-Foula)
DR 304 (ex-Staffa)	DR 309 (ex-Grain)	DR 314 (ex-Ensay)
DR 305 (ex-Filla)	DR 310 (ex-Othello)	DR 315 (ex-Stroma)
		DR 316 (ex-Hornpipe)

Displacement :	545 tons (770 tons full load)
Dimensions :	150 (pp.), 164 (o.a.) $\times 27\frac{3}{4}$ $\times 11$ feet
Guns :	1—3 inch, 2—20 mm. AA.
Machinery :	Triple expansion. I.H.P. : 950 = 12 kts.

Note.—All Admiralty design trawlers of "Isles", "Dance" and "Shakespearean" classes on loan from Great Britain. NATO Pendant Nos. 5301 to 5316 respectively.

Magnetic Minesweepers (Dragamine Magnetici).  
30 + 7 "Flower" Class. New Construction.



ACACIA. 1954, Ing. L. Accorsi.

M 5501 ABETE	M 5511 NOCE	M 5533 EDERA
M 5502 ACACIA	M 5512 OLMO	M 5534 GAGGIA
M 5503 BETULLA	M 5513 ONTANO	M 5535 GELSOMINO
M 5504 CASTAGNO	M 5514 PINO	M 5536 GIAGGIOLO
M 5505 CEDRO	M 5515 PIOPPO	M 5537 GLICINE
M 5506 CILIEGIO	M 5516 PLATANIO	M 5538 LOTO
M 5507 FAGGIO	M 5517 QUERCIA	M 5539 MIRTO
M 5508 FRASSINO	M 5518 SALICE	M 5540 TIMO
M 5509 GELSO	M 5531 AGAVE	M 5541 TRIFOGLIO
M 5510 LARICE	M 5532 ALLORO	M 5542 VISCHIO

Displacement :	375 tons
Dimensions :	144 (o.a.) $\times 26\frac{1}{2} \times 8\frac{1}{2}$ feet
Guns :	1—20 mm.
Machinery :	Diesel. Speed : 15 kts.

Notes.—Magnetic type minesweepers. 30 transferred by U.S. Navy 1953-54. All AMS 60 class NATO motor minesweepers. The first 18 had the U.S. hull numbers AMS 72-76, 79-82 88-90, 13-138. Seven under construction in Italian yards.

Coastal Minesweepers (Dragamine).

New Construction: 20 harbour minesweepers of 142 tons are building in Italian yards for the Italian Fleet to the order of the NATO.



DR 20. 1954, Lieut. Aldo Fraccaroli.

DR 20	DR 32	DR 34	DR 38	DR 40	DR 41
Displacement :	156 tons				
Dimensions :	116 $\times 19 \times 6$ feet				
Guns :	1—3 inch.				
Machinery :	Triple expansion. I.H.P. : 750 = 10 kts.				
Boiler :	1 Thornycroft (coal-fired)				

Note.—All launched 1919-20. NATO Pendant Nos. 5320, 5332, 5334, 5338, 5340.

Motor Minesweepers (Dragamine).

6 "Anemone" Type (Two funnels).



NARCISO 1952, A. & J. Pavia.

M 5400 ANEMONE (ex-BYMS 2009)	M 5409 MUGHETTO (ex-BYMS 2023)
M 5403 BIANCOSPINO (ex-BYMS 2012)	M 5410 NARCISO (ex-BYMS 2024)
M 5407 GERANIO (ex-BYMS 2014)	M 5411 OLEANDRO (ex-BYMS 2027)

Note.—Formerly designated DR 409, 410, 412, 413, 414, 415, respectively.

11 "Azalea" Type (One funnel).



TULIPANO 1954, Ing. L. Accorsi

M 5401 AZALEA (ex-BYMS 2142)	M 5408 MAGNOLIA (ex-BYMS 2206)
M 5402 BEGONIA (ex-BYMS 2073)	M 5412 ORCHIDEA (ex-BYMS 2037)
M 5404 DALIA (ex-BYMS 2141)	M 5413 PRIMULA (ex-BYMS 2278)
M 5405 FIORDALISO (ex-BYMS 2277)	M 5414 TULIPANO (ex-BYMS 2194)
M 5406 GARDENIA (ex-BYMS 2150)	M 5415 VERBENA (ex-BYMS 2280)
M 5416 GLADIOLIO	

Displacement :	290 tons (335 tons full load)
Dimensions :	136 (o.a.) $\times 24\frac{1}{2} \times 6$ feet
Guns :	1—3 inch, 2—20 mm. AA.
Machinery :	G.M. Diesel. B.H.P. : 1,000 = 13 kts
Fuel :	16 tons

Note.—Formerly designated DR 401, 402, 403, 411, 404, 417, 405, 406, 407, 416, 408 respectively.

General Notes.—All above 17 vessels of similar particulars, acquired from U.S. Navy in July 1947.

## Inshore Patrol Boats (*Dragamine di Vigilanza*).



I24, I21, I11.

1951, Lieut. Aldo Fraccaroli.

DV 111 (ex-102)	DV 114 (ex-104)	DV 121 (ex-132)	DV 124 (ex-134)	DV 132
DV 112 (ex-103)	DV 115 (ex-105)	DV 122 (ex-132)	DV 125 (ex-143)	DV 134
DV 113	DV 116 (ex-149)	DV 123 (ex-133)	DV 131	

Displacement : 101 tons  
 Dimensions :  $111\frac{1}{2} \times 19 \times 4\frac{1}{2}$  eet.  
 Guns : 2—20 mm. AA., 70 cal.  
 Machinery : 2 Petrol motors, (except DV 113 and DV 116, 2 Diesels. B.H.P. : 2,000). 2 shafts. B.H.P. : 2,300 = 16 kts.

Notes.—NATO Pendant Nos. P 401, 402, 403, 404, 405, 406, 411, 412, 413, 414, 415, 421, 422, 424, DV 133 and DV 135 scrapped Aug. 1953. All launched 1944-45. Used for coastal patrols.

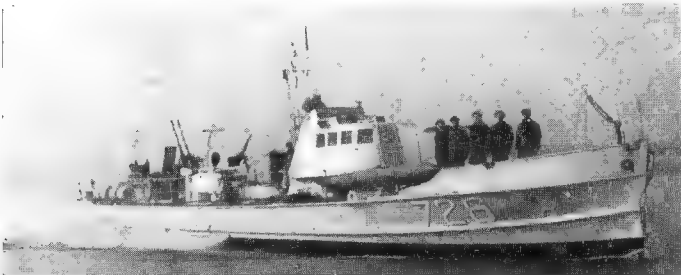
## Coastal Submarine Chasers (*Vedette Anti-Sommergibili*). New Construction.

VAS 1

Displacement :	300 tons
Guns :	4—40 mm. AA.
A/S weapons :	Mousetraps
Speed :	27 kts.

Notes.—One ordered 1952 and laid down 21 Jun 1954 at C.R.D.A. Monfalcone yard. A number of coastal submarine chasers are projected.

P 470 SENTINELLA



VAS 726.

1953 Italian Navy Official.

VAS 712 (ex-204)	VAS 714 (ex-218)	VAS 722 (ex-233)	VAS 726 (ex-241)
VAS 713 (ex-211)	VAS 721 (ex-224)	VAS 724 (ex-237)	

Displacement : 69 tons  
 Dimensions :  $92 \times 15\frac{1}{2} \times 4\frac{1}{2}$  eet.  
 Guns : 3—20 mm. AA., 4 M.G., 1 D.C.T.  
 Torpedoes : 2—18 inch  
 Machinery : 1 Isotta-Fraschini motor, B.H.P. : 1,000. 2 Carraro motors each B.H.P. : 300. Aggregate 1,600 B.H.P. = 19 kts.  
 Complement : 26

Note.—All launched 1942. VAS 711, VAS 715, VAS 723, and VAS 725 removed from the effective list 1953. Pendant Nos. P 472, 473, 474, 481, 482, 484, 486, respectively.

## Motor Torpedo Boats.



MTB 814

1953, A. & J. Pavia.

MS 811	MS 813	MS 821	MS 823	MS 831	MS 833
MS 812	MS 814	MS 822	MS 824	MS 832	MS 834

Guns : 5—20 mm.  
 Torpedoes : 2 (no tubes)  
 Speed : 42 kts. (actual sea speed 35 kts.)

Notes.—All Vosper type. Pendant Nos. P 431-434, 436-439, 441-444.



MTB 833

1954, Official.

MS 841	MS 843	MS 851	MS 853
MS 842	MS 844	MS 852	MS 854

Guns : 1—37 mm., 54 cal., 4—20 mm., 65—70 cal.  
 Torpedoes : 2 (no tubes)  
 Speed : 40 kts. (actual sea speed 34 kts.)

Notes.—All of American construction. Higgins type. Refitted in Italy 1949-53. Pendant Nos. P 446-449, 451-454.



MS 614.

1954, Official.

MS 611 (ex-MV 611, ex-MS 11)	MS 615 (ex-MV 615, ex-MS 55)	MS 619
MS 612 (ex-MV 612, ex-MS 24)	MS 616 (ex-MV 616, ex-MS 56)	MS 621
MS 613 (ex-MV 613, ex-MS 31)	MS 617 (ex-MV 617, ex-MS 72)	
MS 614 (ex-MV 614, ex-MS 54)	MS 618 (ex-MV 618, ex-MS 73)	

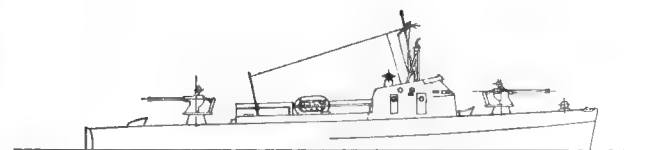
Displacement : 63-68 tons  
 Guns : 4 or 5—20 mm. M.G.  
 Tubes : All have 2—21 inch (and 2—17.7 inch without tubes)  
 Speed : 33-34 kts. (designed), now 27-28 kts.

Notes.—Ex-MS (Motosilurante = motor torpedo boats). Built 1942-43 at C.R.D.A. Monfalcone yard ; converted with no tubes under terms of Peace Treaty. Reconverted 1951-53. MS 611 has neither torpedoes nor tubes. Pendant Nos. P 461-470, P 460, respectively.

## Patrol Boats, Motor Torpedo Boats and Gunboats—ITALY

### Motor Gunboats (*Motocannoniere*).

#### 4 New Construction



MC 490

Displacement :	160 tons
Dimensions :	Length 125 feet
Guns :	2—40 mm.
Speed :	40 kts. (accelerating from 20 to full speed very rapidly).

Notes.—Authorized Nov. 1950. MC 490 ordered from C.R.D.A. Monfalcone Yard, 1952 and launched 21 Jan. 1954.

### Support Gunboats (*Cannoniere d'appoggio*).

(Ex-U.S. Landing Ships, Support/Large).



SPINONE.

Added 1952 (Photo 1951) Lieut. Aldo Fraccaroli.

ALANO (ex-LSSL 34)	MASTINO (ex-LSSL 62)	SEGUGIO (ex-LSSL 64)
BRACCO (ex-LSSL 38)	MOLOSSO (ex-LSSL 63)	SPINONE (ex-LSSL 118)

Displacement :	227 tons (387 tons full load)
Dimensions :	$157\frac{1}{2} \times 26\frac{1}{2} \times 5\frac{3}{8}$ feet
Guns :	5—40 mm., 56 cal. ; 4—20 mm. ; 4—12.7 mm.
Machinery :	8 Gray Marine Diesels 2 shafts. B.H.P. : 900 = 13.5 kts.
Complement :	70

Notes.—Transferred from U.S.A. 25 July, 1951 under the Mutual Defense Assistance Program. Formerly designated LCIs (Landing Craft Infantry). Distinguished by numbers L 9851 to 9856 respectively. 10 landing craft of 61 tons are being built to the order of NATO.

### Surveying Vessels (*Navi Idrografiche*).

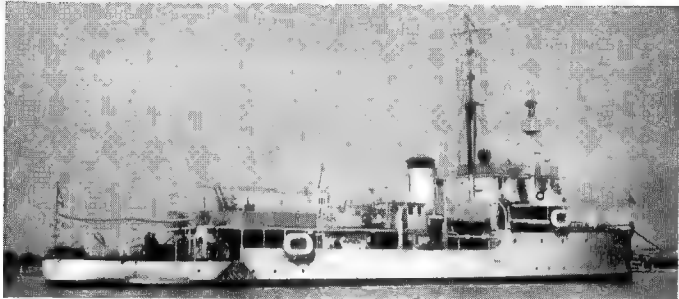
STAFFETTA (ex-Elbano)

Launched :	1941
Displacement :	1,020 tons (1,280 tons full load)
Dimensions :	$205 \text{ (o.a.)} \times 33 \times 14\frac{1}{4}$ feet

Note.—Former British "Flower" class corvette, converted for hydrographic duties.

ITALY—Training Ships, Transports, Oilers etc.

Surveying Vessels—continued.



AZIO

1953, Official.

Displacement : 615 tons  
Dimensions : 204 × 28½ × 8½ feet  
Guns : 4—20 mm. AA. 65 cal.  
Machinery : Triple expansion. 2 shafts. I.H.P. : 1,500 = 15 kts.  
Boilers : 2 watertube. Oil fuel.

Note.—Builders C.N.R. Ancona. Launched 4 May, 1927.

Training Ships (Navi Scuola).



AMERIGO VESPUCCI

1954, Godfrey H. Walker.

Displacement : 3,543 tons  
Dimensions : 229½ (330 o.a.) × 51 × 22 feet  
Machinery : Two Fiat Diesels, with electric drive to 2 Marelli motors. 1 shaft. H.P. : 1,900 = 10.5 kts.  
Complement : 400 + 150 midshipmen

Notes.—Built at Castellammare. Launched 22 March 1930. Sail area : 22,600 sq. ft. Hull masts and yards of steel. Loud speakers and echo-sounding gear included in equipment.

PALINURO (ex-Commandant Louis Richard)

Displacement : 1,500 tons  
Dimensions : 204 × 32 × 18½ feet  
Machinery : Diesel. 1 shaft. B.H.P. : 200 = 7 kts.

Notes.—Brigantine. Ex-French vessel, launched in 1920. Purchased 1950.

EBE (sailing ship)

Displacement : 600 tons  
Dimensions : 120 × 25½ × 12 feet  
Machinery : Diesel. 1 shaft. B.H.P. : 200 = 4 kts.

Transports (Navi Trasporto).



Added 1952 (Photo 1951) Lieut. Aldo Fracarelli.

STROMBOLI

Builders : Odero-Terni-Orlando yard, La Spezia  
Completed : 1948  
Displacement : 2,188 tons standard (6,160 tons full load)  
Dimensions : 334½ (o.a.) × 46 × 21½ feet  
Guns : 1—3.9 inch (aft), 2—37 mm. 54 cal. (forward)  
Machinery : One set double reduction geared turbines. S.H.P. 3,700 = 13.5 kts.  
Boilers : 3 water tube. Oil fuel.

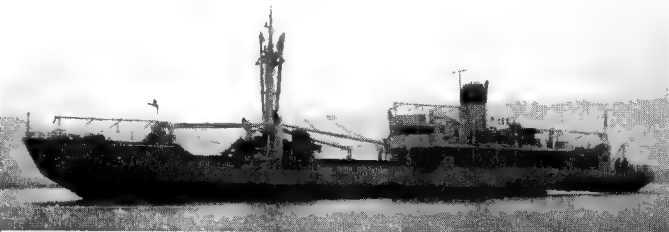
Notes.—Also employed as a depot and experimental ship, and simulates an aircraft carrier in manoeuvres. Flagship of 1st Divisione.



1950, Italian Navy, Official

TARANTOLA

Displacement : 512 tons  
Machinery : Tosi Diesel. B.H.P. : 380 = 10.5 kts.



1949 Official.

MONTEGRAPPA (ex-KT 10)

Launched : 15 May, 1943  
Displacement : 700 tons  
Dimensions : 203½ × 36 × 4 feet  
Machinery : Triple expansion with l.p. exhaust turbine. I.H.P. : 2,400 = 13.5 kts.  
Coal : 150 tons

Notes.—Formerly in German Navy. Transport Cherso was discarded in 1953.

Diving Tenders.

NEREO (1948)

Displacement : 1,200 tons  
Dimensions : 157½ × 32½ × 13 feet  
Machinery : Triple expansion. 1 shaft. I.H.P. : 1,000 = 6 kts.

ERCOLE (1903)

Displacement : 1,000 tons  
Dimensions : 180½ × 29½ × 12 feet  
Machinery : Triple expansion. 2 shafts. I.H.P. : 1,900 = 13 kts.

Oilers (Navi Cisterna per Nafta).



1951, Italian Navy, Official.

URANO

Builders : Deutsche Werke, Kiel  
Launched : 1922  
Displacement : 10,550 tons  
Dimensions : 414½ × 54 × 23½ feet  
Machinery : Diesels. 2 shafts. H.P. : 2,000 = 11 kts.  
Cargo : 8,000 tons

Note.—Built under First World War Reparations account.

BRENNERO

Builders : Riva-Trigoso, Genova  
Launched : 1921  
Displacement : 10,500 tons  
Dimensions : 328 × 59 × 24 feet  
Machinery : Triple expansion. 1 shaft. I.H.P. : 2,600 = 10 kts.  
Cargo : 7,000 tons

PROMETEO (ex-Ostia)

Builders : Stab. Tecnico Triestino  
Launched : 1920  
Displacement : 1,096 tons  
Dimensions : 179½ × 26½ × 11 feet  
Guns : 2—3 inch AA.  
Machinery : Triple expansion. 1 shaft. H.P. : 600 = 9 kts.  
Boiler : 1 Yarrow oil-fired

NETTUNO

Builders : Cant. Nav. Riuniti, Palermo  
Launched : 1916  
Displacement : 9,540 tons  
Dimensions : 416½ × 51½ × 24 feet  
Guns : 3—4.7 inch. 2—3 inch A.A.  
Machinery : Triple expansion. 2 shafts. I.H.P. : 4,200 = 14 kts.  
Boilers : 4 Yarrow oil-fired  
Cargo capacity : 6,000 tons

Landing Craft

20 LCM Type. MTM 9901-9920 (NATO numbers : L 9901-9920) 20 tons, 11 kts.  
25 LCVP Type. MTP 9701-9725 (NATO numbers : L 9701-9725) 8 tons, 12 kts.

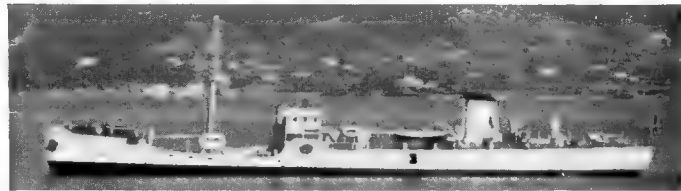


## Water Carriers (Navi Cisterna per Acqua).

**ADIGE** (ex-YW 92) **ISONZO** (ex-YW 77) **TANARO** (ex-YW 99)  
**FLEGETONTE** (ex-YW 95) **TICINO** (ex-YW 79)

Displacement 1,470 tons  
Machinery: 2 Diesels. H.P.: 315 = 8 kts  
Water capacity 850 tons

Note.—Ex-U.S. Army.



**VOLTURNO.** Added 1953, Lieut. Aldo Fraccaroli.

**PO** **VOLTURNO**  
Displacement: 3,336 tons  
Dimensions: 265½ × 38½ × 16½ feet  
Guns: 2—4 inch, 35 cal., 4—13.2 M.G. (Po)  
1—4.7 inch, 45 cal., 4—20 mm. AA. (Vultorno)  
Machinery: Triple expansion. I.H.P.: 1,700 = 11.5 kts.  
Boilers: Oil-fired watertube  
Oil fuel: 226 tons  
Cargo capacity: 2,200 tons

Notes.—Po launched by Cant. Nav. Riuniti, Ancona, 21 Dec., 1936. Vultorno was built by Cantieri del Tirreno, Riva Trigoso, 1936-37, and rebuilding completed in 1951.

**SESIA** **Adriatico**  
Builders: 1933  
Displacement: 1,050 tons  
Dimensions: 213½ × 33 × 11½ feet  
Guns: 4 M.G. Fitted for minelaying  
Machinery: Fiat Diesels. 2 shafts. B.H.P.: 600 = 9.5 kts.

**METAURO** **Quarnaro**  
Builders: 1933  
Displacement: 592 tons  
Dimensions: 119 × 26½ × 10½ feet  
Machinery: Tosi Diesels. B.H.P.: 400 = 9 kts.

**ARNO** **Odero-Terni-Orlando, La Spezia**  
Builders: 1929  
Displacement: 634 tons  
Dimensions: 138½ × 26 × 10 feet  
Machinery: 1 Fiat Diesel. B.H.P.: 350 = 9 kts.

**MINCIO** **Venice**  
Built: 1929  
Displacement: 645 tons  
Dimensions: 138½ × 26½ × 10 feet  
Machinery: Tosi Diesels. B.H.P.: 350 = 9 kts.

**IDRIA** **TIMAVO** **VIPPACCO**  
Displacement: 265 tons  
Machinery: 1 Diesel Tosi. B.H.P.: 200 = 8 kts

Note.—All built by C.O.M.I., Venezia, 1921-26.

**FRIGIDO** (ex-Fukuju Maru) **Osaka**  
Built: 1912  
Displacement: 398 tons  
Dimensions: 116½ × 21½ × 10 feet  
Guns: 2 M.G.  
Machinery: Triple expansion. I.H.P.: 221 = 9 kts.  
Boiler: 1 cylindrical

Note.—Purchased 1916.

## Water Carriers—continued.



Added 1953, Lieut. Aldo Fraccaroli.

**DALMAZIA** **Quarnaro Yard, Fiume**  
Built: 1922  
Displacement: 2,900 tons  
Dimensions: 260 × 32½ × 15½ feet  
Guns: 1—4.7 inch, 2—20 mm. AA.  
Machinery: Triple expansion. 2 shafts. I.H.P.: 1,450 = 10 kts.  
Boilers: 2 Thornycroft oil-fired  
Cargo: 1,800 tons

**OFANTO** **ORISTANO**  
Displacement: 250 tons  
Machinery: 1 Triple expansion. I.H.P.: 165 = 6 kts.

Note.—Both built by S.E.B., Riva Trigoso, 1913-14.

## Rescue and Salvage Ship.



1952, A. & J. Pavia.

**PROTEO** (ex-Perseo, ex-Proteo) **Cantieri Navali Riuniti, Ancona (see notes)**  
Builders:  
Displacement: 1,727 tons (2,147 tons full load)  
Dimensions: 248 × 38 × 21½ feet  
Guns: 1—3.9 inch AA., 2—20 mm.  
Machinery: Diesel. 2 shafts. B.H.P.: 4,800 = 16 kts.  
Radius: 7,500 miles at 13 kts.

Notes.—Laid down at Ancona in 1943. Suspended in 1944. Seized by Germans and transferred to Trieste. Construction recommenced at Cantiere Navali, Ancona, in 1949.

## Cable Ship.

**VESUVIO**  
Notes.—Completing as a cable ship. Same type as Stromboli. Rampino discarded 1953

## Lighthouse Tender (Nave addetta al Servizio Fari).

**BUFFOLUTO** **Launched: 1924**  
Displacement: 915 tons  
Dimensions: 172½ (pp.), 184½ (o.a.) × 29½ × 11 feet  
Machinery: Triple expansion. I.H.P.: 1,400 = 11 kts  
Boilers: 2 Thornycroft

Note.—Sister ship, Panigaglia, blew up in July, 1947.

## Netlayers.

New Construction: 2 netlayers of 400 tons are building to the order of N.A.T.O.

## Tugs (Rimorchiatori).

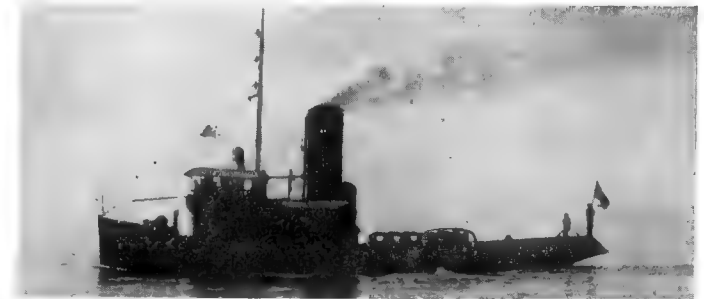
**AUSONIA** **PANARIA**  
Displacement: 240 tons  
**TIFEO** (U.S. built) **Displacement: 450 tons**  
**CICLONE** **TITANO**  
Displacement: 1,200 tons  
Dimensions: 157½ × 32½ × 13 feet  
Machinery: Triple expansion. 1 shaft. I.H.P.: 1,000 = 8 kts.

Note.—All above launched in 1948.

**MISENO** **MONTE CRISTO**  
Displacement: 285 tons  
Note.—Former U.S. Navy tugs.  
**GAGLIARDO** **ROBUSTO**  
Displacement: 389 tons  
Machinery: I.H.P.: 1,000 = 12 kts.

Note.—Both launched 1939.

**PORTO EMPEDOCLE** **Launched: 1914**  
Displacement: 330 tons  
Guns: 1—3 inch  
Machinery: I.H.P.: 500 = 11 kts.



**SALVORE.** 1951, Italian Navy, Official.

**PORTO FOSSONE** **PORTO QUIETO** **PORTO TORRES**  
**PORTO PISANO** **PORTO RECANATI** **SALVORE**  
Displacement: 226 tons  
Dimensions: 88½ × 22 × 10 feet  
Guns: 1—3 inch  
Machinery: I.H.P.: 600 = 11 kts.

Note.—All launched 1936-37.

**ATLETA** (ex-LT 152) **COLOSSO** (ex-LT 214) **FORTE** (ex-LT 159) **TENACE** (ex-LT 154)

Displacement: 525 tons  
Machinery: 2 Diesels. H.P.: 690 = 11 kts.

**TINO** **Launched: 1931**  
Displacement: 270 tons

**ATLANTE** **Launched: 1928**  
Displacement: 355 tons  
Guns: 1—3 inch  
Machinery: I.H.P.: 900 = 11 kts.

Note.—Sunk by collision in harbour at Genoa in Jan., 1948, but later salvaged.

JAPAN

NATIONAL SAFETY AGENCY

MARITIME SAFETY BOARD

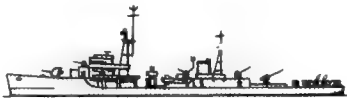
Maritime Safety Agency

Yonekichi Yanagisawa, Director General

COASTAL SECURITY FORCE

Silhouette

Scale : 150 feet = 1 inch.



CHIKUBU.

Frigates.

18 "Tree" Class (U.S. PF Type).



SUGI.

1954, Hajime Fukaya.

**KASHI** (ex-U.S.S. Pasco, PF 6)  
**KAYA** (ex-U.S.S. San Pedro, PF 37)  
**KUSU** (ex-U.S.S. Ogden, PF 39)  
**MATSU** (ex-U.S.S. Charlottesville, PF 25)  
**MOMI** (ex-U.S.S. Ploughkeepsie, PF 26)  
**NARA** (ex-U.S.S. Machias, PF 53)

**NIRE** (ex-U.S.S. Sandusky, PF 54)  
**SUGI** (ex-U.S.S. Coronado, PF 38)  
**UMI** (ex-U.S.S. Allentown, PF 52)  
(ex-U.S.S. Albuquerque, PF 7)  
(ex-U.S.S. Bayonne, PF 21)  
(ex-U.S.S. Bath, PF 55)

(ex-U.S.S. Burlington, PF 51)  
(ex-U.S.S. Carson City, PF 50)  
(ex-U.S.S. Evansville, PF 70)  
(ex-U.S.S. Everett, PF 8)  
(ex-U.S.S. Gloucester, PF 22)  
(ex-U.S.S. Long Beach, PF 34)

Displacement : 1,430 tons (2,100 tons full load)  
Dimensions : 304 (o.a.) x 37½ x 13½ (max.) feet  
Guns : 3—3 inch, 50 cal., d.p. 10—40 mm. and 20 mm. AA.  
Machinery : Triple expansion. 2 shafts. I.H.P. : 5,500 = 20 kts.  
Complement : 180

Notes.—Of similar design to British frigates of "River" class. All launched 1943. Transferred from U.S.A. in 1953 and attached to the Japanese Coastal Security Force. Kashi, Kusu (flag), Matsu, Momi, Nara and Sugi (flag) officially handed over to Marine Security Guards from U.S. Navy 14 Jan. 1953 at Yokosuka. Sugi and Matsu constitute 1st Flotilla, remainder 2nd Flotilla. All named after trees like former destroyers. Maki, the last ship of 8 frigates loaned from the U.S. Navy turned over on Dec. 23, 1953, at Yokosuka naval base.

Japanese-United States Mutual Security Agreement.

Four U.S. vessels for transfer to Japan in October 1954, the first of 17 warships Japan requested under the Japanese-United States Mutual Security Agreement, are 2 destroyers, *Ellyson* and *Macomb*, of 1,630 tons (DDs) and 2 destroyer escorts of 1,400 tons (DEs).

Projected Construction.

2 defence vessels of 1,500 tons with a speed of over 20 kts.  
3 fast defence vessels of 700 to 1,000 tons.  
6 minesweepers in replacement of old vessels.  
Some fast patrol boats of 50 to 60 tons.  
Total about 15 ships at estimated cost of ¥12,000,000,000.

Merchantile Marine.

Lloyd's Register appendix, 1954 : 1,669 vessels of 3,250,412 tons gross.

Gunboats.

50 "Flower" Class (U.S. LSSL Type).



1953, U.S. Navy, Official.

**AKANE** (ex-U.S.S. LSSL 100)  
**AOI** (ex-U.S.S. LSSL 98)  
**AYAME** (ex-U.S.S. LSSL 115)  
**BARA** (ex-U.S.S. LSSL 78)  
**FUJI** (ex-U.S.S. LSSL 75)  
**FUYO** (ex-U.S.S. LSSL 110)  
**HAGI** (ex-U.S.S. LSSL 130)  
**HAMAGIKU** (ex-U.S.S. LSSL 87)  
**ISOGIKU** (ex-U.S.S. LSSL 106)  
**KESHI** (ex-U.S.S. LSSL 111)  
**KIKU** (ex-U.S.S. LSSL 57)  
**NOGIKU** (ex-U.S.S. LSSL 22)  
**RAN** (ex-U.S.S. LSSL 104)  
**SUMIRE** (ex-U.S.S. LSSL 14)  
**YAMAGIKU** (ex-U.S.S. LSSL 82)  
**YURI** (ex-U.S.S. LSSL 107)  
(ex-U.S.S. LSSL 12)  
(ex-U.S.S. LSSL 13)

(ex-U.S.S. LSSL 18)  
(ex-U.S.S. LSSL 20)  
(ex-U.S.S. LSSL 24)  
(ex-U.S.S. LSSL 25)  
(ex-U.S.S. LSSL 27)  
(ex-U.S.S. LSSL 52)  
(ex-U.S.S. LSSL 56)  
(ex-U.S.S. LSSL 58)  
(ex-U.S.S. LSSL 60)  
(ex-U.S.S. LSSL 67)  
(ex-U.S.S. LSSL 68)  
(ex-U.S.S. LSSL 72)  
(ex-U.S.S. LSSL 74)  
(ex-U.S.S. LSSL 76)  
(ex-U.S.S. LSSL 79)  
(ex-U.S.S. LSSL 81)  
(ex-U.S.S. LSSL 83)  
(ex-U.S.S. LSSL 84)

(ex-U.S.S. LSSL 85)  
(ex-U.S.S. LSSL 88)  
(ex-U.S.S. LSSL 89)  
(ex-U.S.S. LSSL 90)  
(ex-U.S.S. LSSL 94)  
(ex-U.S.S. LSSL 95)  
(ex-U.S.S. LSSL 96)  
(ex-U.S.S. LSSL 101)  
(ex-U.S.S. LSSL 102)  
(ex-U.S.S. LSSL 103)  
(ex-U.S.S. LSSL 105)  
(ex-U.S.S. LSSL 109)  
(ex-U.S.S. LSSL 114)  
(ex-U.S.S. LSSL 116)  
(ex-U.S.S. LSSL 119)  
(ex-U.S.S. LSSL 120)  
(ex-U.S.S. LSSL 126)  
(ex-U.S.S. LSSL 129)

Displacement : 227 tons (383 tons full load)  
Dimensions : 158½ (o.a.) x 23½ x 5½ (max.) feet  
Guns : 1—3 inch, 50 cal., 4—40 mm. AA.  
Machinery : Diesel. 2 shafts. B.H.P. : 1,600 = 14.5 kts.  
Complement : 73

Notes.—Former American LSSLs (Landing Ships Support, Large). Type transferred from U.S.A. in 1953. *Hagi*, *Kiyu*, *Ran*, *Yuri* officially handed over to Marine Security Guards from U.S. Navy at Yokosuka 14 Jan. 1953. Constitutes 11th Flotilla. Named after flowers. Attached to the Japanese Coastal Security Force. Four of the above ships were transferred to the Ryukyuan Coast Guard (under the U.S. Military Government) instead of Japan. Two more LSSLs not listed above were transferred to the Republic of Korea.

## Escort Vessels.

### SHIGA

Displacement : 1,020 tons  
Speed : 19.5 kts.

Note.—In reserve. Belongs to and used by Home Affairs Department.



CHIKUBU.

### CHIKUBU

### IKUNA

### SHINNAN

Added 1953, Hajime Fukaya.

### UKURU

Displacement : 940 tons standard (1,020 tons trial)  
Dimensions :  $258\frac{1}{2} \times 30$  (o.a.)  $\times 10$  feet  
Machinery : Diesel, 2 shafts. B.H.P. : 4,200 = 19.5 kts.  
Radius : 5,000 miles at 16 kts.

Notes.—All employed as Weather Ships. "Ukuru" class. Wartime armament was 3—4.7 inch, 16—25 mm. AA., 1—80 mm. mortar, 120 D.C. Belong to Home Affairs Department.

### ISHIKARI

Note.—Rescue ship of destroyer escort type operated by Japanese Coast Guard.

## Large Patrol Vessels.



MURUTO (note bridge).

1953, courtesy Uruga Dock Co., Ltd. (Builders)

### DAIO PL 02

### MURUTO PL 03

Displacement : 750 tons standard, 840 tons normal  
Dimensions : 182 (pp.), 200 (o.a.)  $\times 30\frac{1}{2} \times 10\frac{1}{2}$  feet  
Machinery : 2 sets 4 cycle single acting diesels, 270 r.p.m. B.H.P. : 1,500 = 15.37 kts. (trials, 12 kts. service)

Notes.—Muroto built by Uruga Dock Company Limited, Tokyo, keel laid 16 Aug. 1949, launched 5 Dec. 1949, delivered 20 Mar. 1950 to Maritime Safety Agency. Rated as Large Patrol Vessels. Vertical tubular donkey boiler, three generators, wireless, radar, direction finder, echo-sounder, etc.; novel streamlined bridge wings. SCAJAP hull number M 131 removed after signing of Peace Treaty.

### MIURA PL 01

Displacement : 680 tons standard, 879 tons normal  
Dimensions : 160 $\frac{1}{2}$  (pp.), 175 $\frac{1}{2}$  (o.a.)  $\times 31\frac{1}{2} \times 11\frac{1}{2}$  feet  
Machinery : Reciprocating. I.H.P. : 2,200 = 12 kts.  
Boilers : 2

Note.—Former naval tug. Completed 5 Dec. 1944. PL 04 is a medium sized ex-freighter used as a training ship.

## Medium Patrol Vessels.

### 22 "Reibun" Class.



### NOTO.

AWAJI  
MIYAKE  
SADO  
REIBUN  
IKI  
OKI  
GENKAI

PM 01  
PM 02  
PM 03  
PM 04  
PM 05  
PM 06  
PM 07

HACHIJO  
AMAKUSA  
OKUSHIRI  
KUSAGAKI  
RISHIRI  
NOTO  
HEKURA

PM 08  
PM 09  
PM 10  
PM 11  
PM 12  
PM 13  
PM 14

MIKURA  
KOSHIKI  
HIRADO  
CHIBURI  
KUROKAMI  
KOZU  
SHIKINE  
DAITO

1953, Hajime Fukaya.

PM 15  
PM 16  
PM 17  
PM 18  
PM 19  
PM 20  
PM 21  
PM 22

Displacement

PM 01-03: 510 tons standard, 550 tons normal  
PM 04-22: 450 tons standard, 488 tons trials, 495 tons normal

Dimensions :

155 $\frac{1}{2}$  (pp.), 164 (w.l.), 170 $\frac{1}{2}$  (o.a.)  $\times 26\frac{1}{2} \times 8\frac{1}{2}$  feet (PM 01-03, 172 (o.a.)  $\times 26\frac{3}{4} \times 9\frac{1}{2}$  feet)

Machinery :

2 sets diesel. B.H.P. : 1,300 = 15 kts.

Radius :

3,000 miles at 12 kts.

Notes.—PM 01-03 completed 1950, PM 04-17 in 1951 and PM 18-22 in 1952. New vessels of a design resembling United States Coast Guard Cutters. Owned by Government of Japan (Maritime Safety Agency).

## Small Patrol Vessels.

### 20 "Kuma" Class.



### OHYODO.

KUMA  
FUJI  
TENRYU  
ISUZU  
ISKIKARI

PS 62  
PS 63  
PS 64  
PS 65  
PS 66

SAGAMI  
OHYODO  
KUZURYU  
ABUKUMA  
KIKUCHI

PS 67  
PS 68  
PS 69  
PS 70  
PS 71

MOGAMI  
YOSHINO  
NOSHIO  
KIOS  
SHINANO

PS 72  
PS 73  
PS 74  
PS 75  
PS 76

CHIKU GO  
KUMANO  
NAGARA  
TONE  
KITAKAMI

PS 77  
PS 78  
PS 79  
PS 80  
PS 81

1953, courtesy Uruga Dock Co., Ltd. (Builders)

Displacement :

258 tons standard, 275 tons normal

Dimensions :

122 (pp.), 126 $\frac{1}{2}$  (w.l.), 132 $\frac{1}{2}$  (o.a.)  $\times 23 \times 7\frac{1}{2}$  feet

Machinery :

2 sets 4 cycle single acting diesels. B.H.P. : 800 = 13.6 (max.), 12 kts. (service)

Radius :

2,000 miles at 12 kts.

Notes.—Ohoyo built by Uruga Dock Co., Ltd., keel laid 15 Dec. 1950, launched 7 May 1951, delivered 6 Aug. 1951. Owned by Japanese Maritime Safety Agency. Cochrane oil burning donkey boiler, two generators, wireless, gyro compass, echo-sounder, radar, direction finder, etc.

JAPAN—Coast Guard Vessels

Small Patrol Vessels—continued.

WAKACHIDORI	PS 44 (ex-No. 1540)	KYODO MARU	PS 56 (ex-No. 1538)
HAMACHIDORI	PS 45 (ex-No. 1338)	TOMOCHIDORI	PS 58 (ex-No. 1264)
ASACHIDORI	PS 46 (ex-No. 1332)	OHI MARU	PS 60 (ex-No. 1541)
NAKATA MARU		OTAKA MARU	
No. 16	No. 1090	No. 1336	
Displacement :	290 tons		
Dimensions :	152½ (o.a.) × 22½ × 7½ feet		
Machinery :	2 diesels. B.H.P. : 800 = 14 kts.		
KASASAGI	PS 01 (ex-No. 175)	CHIDORI	PS 18 (ex-No. 1)
WAKASAGI	PS 02 (ex-No. 198)	HAYABUSA	PS 19 (ex-No. 185)
MANAZURU	PS 03 (ex-No. 245)	KIJI	PS 20 (ex-No. 4)
YAMADORI	PS 04 (ex-No. 187)	KAWASEMI	PS 21 (ex-No. 57)
OSHIDORI	PS 05 (ex-No. 227)	HIYODORI	PS 22 (ex-No. 203)
UGUISU	PS 06 (ex-No. 154)	KOTAKA	PS 24 (ex-No. 161)
TSUGUMI	PS 07 (ex-No. 217)	WAKATAKA	PS 25 (ex-No. 196)
SEKIREI	PS 08 (ex-No. 80)	SHIGI	PS 26 (ex-No. 155)
OHTAKA	PS 09 (ex-No. 232)	KAMOME	PS 27 (ex-No. 68)
KARI	PS 10 (ex-No. 239)	OTORI	PS 28 (ex-No. 78)
YAMASEMI	PS 11 (ex-No. 169)	UZURA	PS 32 (ex-No. 58)
BENIZURU	PS 12 (ex-No. 183)	OHSAGI	PS 37 (ex-No. 157)
HATSUKARI	PS 13 (ex-No. 186)	HINAZURA	PS 38 (ex-No. 159)
SHIRASAGI	PS 14 (ex-No. 219)	HOOJIRO	PS 39 (ex-No. 71)
KOMADORI	PS 15 (ex-No. 236)	SHIRATAKA	PS 40 (ex-No. 173)
HATO	PS 17 (ex-No. 166)	YAMAGARA	PS 41 (ex-No. 179)
		MIZUTORI	PS 42 (ex-No. 194)

Displacement : 135 tons  
Dimensions : 95½ (o.a.) × 18½ × 6½ feet  
Machinery : Diesel. B.H.P. : 400 = 11 kts.

Note.—Auxiliary Submarine Chaser type, built of wood.

**KATOKU** PS 29  
Displacement : 405 tons standard, 430 tons normal  
Dimensions : 160½ (o.a.) × 25 × 7½ feet  
Machinery : Reciprocating. 2 shafts. I.H.P. : 600 = 12 kts.

Note.—Ex-naval auxiliary minelayer of the same name.

AICHI MARU	PS 30	SHIMACHIDORI	PS 50 (ex-No. 870)
EIKAI MARU	PS 31	ARB	PS 48 (ex-No. 1341)
KOJO MARU	PS 33	TATEKUMARA	PS 49 (ex-No. 1089)
HAYABUSA MARU	PS 35	MURACHIDORI	PS 57 (ex-No. 1091)
IWACHIDORI	PS 61 (ex-No. 873)	KABASHIMA	PS 59
ISOCHIDORI	PS 43 (ex-No. 902)	SAYOCHIDORI	PS 52
No. 930		YUFU MARU	

Note.—Small patrol vessels of various displacements from 81 to 205 tons.

Patrol Boats.



SUZUTSUKI.			1953, Hajime Fukaya.		
HATSUNAMI	PC 01	CHIYONAMI	PC 09	TERUZUKI	PC 17
AYANAMI	PC 02	HAYANAMI	PC 10	URAZUKI	PC 18
ISONAMI	PC 03	HATSUZUKI	PC 11	WAKAZUKI	PC 19
URUNAMI	PC 04	HANADUKI	PC 12	YAMAZUKI	PC 20
KIYONAMI	PC 05	KIYOTSUKI	PC 13	HARUZUKI	PC 21
ORINAMI	PC 06	MOCHIZUKI	PC 14	NATSUZUKI	PC 22
TAMANAMI	PC 07	NIIZUKI	PC 15	AKIZUKI	PC 23
SUZUNAMI	PC 08	SUZUTSUKI	PC 16	YUZUKI	PC 24

Displacement : 45 tons  
Dimensions : 75½ (o.a.) × 14½ × 3 feet  
Machinery : 2 diesels. B.H.P. : 700 = 14 kts.

Note.—Rated as local patrol boats. Patrol chaser type.

**MUTSUKI** PC 25  
Displacement : 55 tons  
Dimensions : 83½ (o.a.) × 15½ × 4½ feet  
Machinery : 2 diesels. B.H.P. : 1,000 = 16 kts.



HATSUKAZE CL 11. 1953, Hajime Fukaya.

**CL 01 to CL 111**  
Notes.—92 harbour patrol boats ranging from 15 to 451 tons displacement  
**CS 01 to CS 105**  
Notes.—89 small craft of various displacements.  
There are also 5 STR craft (STR 01 to STR 05), 20 CR boats, 7 CF boats, 3 HM boats, 22 HS boats, 2 LL boats, 3 LM boats, and 7 LS boats.

Minesweepers.



MS 20. 1953, Hajime Fukaya.

MS 18 (ex-No. 31)	MS 23 (ex-No. 138)	MS 27 (ex-No. 154)
MS 19 (ex-No. 84)	MS 24 (ex-No. 139)	MS 28 (ex-No. 175)
MS 20 (ex-No. 134)	MS 25 (ex-No. 152)	MS 29 (ex-No. 179)
MS 21 (ex-No. 135)	MS 26 (ex-No. 153)	MS 30 (ex-No. 191)
MS 22 (ex-No. 136)		

Displacement : 250 tons  
Dimensions : 105½ (o.a.) × 20 × 7½ feet  
Machinery : Diesel. B.H.P. : 400 = 9 kts.

Notes.—Ex-naval Auxiliary Patrol Craft types of wooden construction, used as minesweepers.

MS 01 (ex-No. 171)	MS 09 (ex-No. 86)	MS 57 (ex-No. 168)
MS 02 (ex-No. 221)	MS 10 (ex-No. 88)	MS 81 (ex-No. 4)
MS 03 (ex-No. 222)	MS 11 (ex-No. 90)	MS 82 (ex-No. 78)
MS 04 (ex-No. 241)	MS 12 (ex-No. 93)	MS 83 (ex-No. 196)
MS 05 (ex-No. 246)	MS 13 (ex-No. 99)	MS 84 (ex-No. 203)
MS 06 (ex-No. 249)	MS 15 (ex-No. 214)	MS 85 (ex-No. 219)
MS 07 (ex-No. 72)	MS 16 (ex-No. 215)	MS 86 (ex-No. 232)
MS 08 (ex-No. 79)	MS 17 (ex-No. 231)	

Displacement : 135 tons  
Dimensions : 95½ (o.a.) × 18½ × 6½ feet  
Machinery : Diesel. B.H.P. : 400 = 11 kts.

Notes.—Ex-naval Auxiliary Submarine Chaser and minesweeper types of wooden construction

MS 33	MS 39	MS 56	MS 66	MS 71
MS 34	MS 41	MS 58	MS 67	MS 72
MS 35	MS 42	MS 59	MS 68	MS 75
MS 36	MS 50	MS 60	MS 69	MS 77
MS 37	MS 54	MS 61	MS 70	MS 80
MS 38	MS 55	MS 62		

Notes.—Auxiliary minesweepers of various displacements up to 350 tons.

Minesweeping Headquarters Ships.

<b>SOEI-MARU MS 32</b>	Displacement : 2,850 tons standard, (6,145 tons full load)
	Machinery : S.H.P. : 1,200 = 11.5 kts.
Note.—Ex-wartime 2 TM tanker used as a "guinea pig" in minesweeping.	
<b>MS 31</b>	Displacement : 6,888 tons (14,250 tons full load)
	Machinery : I.H.P. : 2,200 = 13 kts.

Transport.



SOYA (ex-Chiryō Maru) Added 1952, Hajime Fukaya.

**SOYA (ex-Chiryō Maru)**  
Builders : Koyakijima, Kowaminami Co.  
Completed : 10 June 1938  
Displacement : 3,800 tons standard (2,224 tons gross)  
Dimensions : 257 (pp.) × 42 × 20½ feet  
Guns : 1—3.1 inch (80 mm.) AA., 1—25 mm. AA., 10 D.C.  
Machinery : Reciprocating. 1 shaft. I.H.P. : 1,597 = 12.37 kts.  
Notes.—Originally for U.S.S.R. taken over by Navy and reconstructed at Yokosuka for service in northern waters. Was given an icebreaker bow. Commissioned 4 June, 1940.

Cable Layer.



TSURISHIMA Added 1952, Hajime Fukaya.

**TSURISHIMA**  
Builders : Kawasaki Kobe  
Laid down : 15 Jan. 1940  
Launched : 24 May, 1940  
Completed : 23 Mar. 1941.  
Displacement : 1,564 tons standard, 1,700 tons trial  
Dimensions : 252 (o.a.) × 35½ × 110 feet  
Guns : 1—3.1 inch AA., 6—25 mm. AA. (2 twin, 2 single), D.C.  
Machinery : Reciprocating. 2 shafts. I.H.P. : 2,300 = 14 kts.  
Notes.—"Hashima" class. Belongs to and used by Home Affairs Department. Sister ships Hashima, Otake and Tateishi lost during war.

Salvage Vessel.

**KURIHASHI**  
Displacement : 800 tons standard (1,040 tons full load)  
Dimensions : 190 (o.a.) × 30 × 11½ feet  
Machinery : Reciprocating. I.H.P. : 1,600 = 12.5 kts.  
Note.—Ex-naval salvage ship purchased during Russo-Japanese war.

# KOREA

## Patrol Vessels.

**BAK DU SAN, PC 701** (ex-Ensign *Whitehead*, ex-U.S.S. PC 823)  
**KIM GAN SANG, PC 702** (ex-U.S.S. PC 810)  
**SAM GAK SANG, PC 703** (ex-U.S.S. PC—)  
**HANLASAN, PC 705** (ex-U.S.S. PC 485)  
**MYOHYANGSAN, PC 706** (ex-U.S.S. PC 600)

Displacement : 280 tons *standard* (450 tons *full load*)  
 Dimensions : 173½ (o.a.) × 23 × 10½ (max.) feet  
 Guns : 1—3 inch, 50 cal., 1—40 mm. AA., 2—20 mm. AA.  
 Machinery : Diesels, 2 shafts. B.H.P. : 2,880 = 20 kts.  
 Complement : 80

*Notes.*—Built 1941-42. Steel. Former United States submarine chasers. *Bak Du San* is a former United States Merchant Marine Academy's training ship. She was purchased by the 7,500 officers and men of the South Korean Navy in Sep. 1949, at a cost of \$18,000 and fitted with guns at Pearl Harbour in Jan. 1950, preparatory to sailing for Chinhae Korea, Naval Base. Three other converted PC boats for the South Korean Navy were at Honolulu on the outbreak of war in Korea. *Chiri San*, PC 704 was mined and sank off Wonsan, Korea, 26 December, 1951.

## Minesweepers.

**KANGJIN AMS 501** **KANGKAE AMS 506** **KIMCHON AMS 513**  
**KYONJU AMS 502** **KANGNUNG AMS 507** **UE NAM AMS 515**  
**KWANGJU AMS 503** **KANGGYONG AMS 510**  
**KIMHAE AMS 505** **KUWALSAN AMS 512**

Displacement : 270 tons (350 tons *full load*)  
 Dimensions : 136 (o.a.) × 24½ × 8 (max.) feet  
 Guns : 1—3 inch, 50 cal., 2—20 mm. AA.  
 Machinery : Diesels, B.H.P. : 1,000 = 15 kts.  
 Complement : 50

*Notes.*—Built 1941-42. Wood. Former United States auxiliary motor minesweepers. All ex-YMS type. Rigged as minesweepers except MS 514 and MS 518, minesweeper type not converted into sweepers. Hull of AMS 504 has been weakened by mine damage and is not considered safe to employ her other than close inshore as Pusan entrance patrol. AMS 516 was mined and sunk in Wonsan Harbour, 19 Oct. 1950. AMS 509 mined 28 Sep. 1950 off Korea.

## Submarine Chasers.

**KAESUNG PCS 504** (ex-YMS 504) **KILCHU PCS 514** (ex-YMS 514)  
**PCS 518** (ex-YMS 518)  
**PCS 201** **PCS 202** **PCS 203** **PCS 204**

*Notes.*—Ex-U.S.N. PCS 1426, 1445, 1446, 1443 acquired in 1952.

## Auxiliary Minelayers.

**TAEJON AMC 301** **TANGHON AMC 307**  
**TONGYONG AMC 302** **TOSUNG AMC 308**  
**TAEJU AMC 303** **TAEDONGGANG AMC 309**  
**TAEBAEKSAN AMC 304** **TUKCHON AMC 310**

*Notes.*—Designed and constructed by the Japanese as light minesweepers and capable of being refitted as such. Formerly designated JML (small ex-Japanese). AMC 306 mined and sunk 5 May 1951. Ex-JML 313, 315 now designated as gunboats PG 313, 315.

## Administration.

Chief of Naval Operations, Republic of Korea Navy :  
 Vice-Admiral Pak-ok-Kyu.

## Personnel.

1,255 officers and 8,900 men.

## Ship Types

Types of vessels are in different number designation classes as follows :

PFs 60 (Frigates). AMCs 300 (ex-Japanese Minelayers).  
 PCs 700 (Patrol Vessels). LSTs 800 (Tank Landing Craft).  
 AMSs. 500 (Minesweepers). FSs. 900.  
 Miscellaneous Types 100 PCSs 200 (Patrol Craft).

About 30 small craft were acquired before hostilities, including a few ex-U.S. auxiliary minesweepers, a flotilla of ten former Japanese coastal minelayers, and some picket boats.

When the U.S. occupation forces were withdrawn from the Republic of Korea in July 1949, 79 vessels, mainly of U.S. Navy Types : Yard Minesweepers (YMS), Landing Craft Infantry (LCI), and Picket Boats, were transferred to the Korean Security Forces.

Ships' names are prefaced by R.O.K. (Republic of Korea).

## Frigates.



TAEDONG.

1952.

**IMJIN** (ex-U.S.S. *Sausalito*, PF 4)  
**DUMAN** (ex-U.S.S. *Muskogee*, PF 49)

Displacement : 1,430 tons (2,100 tons *full load*)  
 Dimensions : 304 (o.a.) × 37½ × 13½ (max.) feet  
 Guns : 3—3 inch, 50 cal., d.p., 10—40 mm. and 20 mm. AA.  
 Machinery : Triple expansion, 2 shafts. I.H.P. : 5,500 = 20 kts.  
 Complement : 180

**NAKTONG** (ex-U.S.S. *Ho-uam*, Pr 5)  
**TAEDONG** (ex-U.S.S. *Tacoma*, PF 3)

*Notes.*—Former United States frigates transferred to Russia under Lend-Lease scheme during the Second World War. Returned to U.S. Navy after hostilities and laid up at Yokosuka naval base in "caretaker" status, preserved but not in use. Reactivated on outbreak of Korean War. First pair loaned to ROK Navy and commissioned 5 Nov. 1950, as soon as personnel could be trained to man them. Second pair transferred to South Korean Navy, 8 Oct. 1951 at Yokosuka. *Apnok* (PF 62) was in major collision 21 May 1952, decommissioned and returned to U.S.N. Replaced by *Imjin*.

Pendant No.	Name	Builders	Launched	Completed
PF 61	<i>Duman</i>	Consolidated Steel Corp., Los Angeles	18 Oct. 1943	16 Mar. 1944
PF 65	<i>Naktong</i>	Permanente	31 July 1943	8 May 1944
PF 63	<i>Taetong</i>	Metals Corp.	7 July 1943	6 Nov. 1943
PF 66	<i>Imjin</i>	Kaiser Cargo Inc., Richmond, Calif.	20 July 1943	4 Mar. 1944

## Motor Torpedo Boats.

**KALMAKEKI PT 23** **KIROKI PT 25** **OLPAMEI PT 26**  
 Displacement : 33 tons *standard* (56 tons *full load*)  
 Dimensions : 80½ × 23½ × 5 feet  
 Machinery : Packard, 3 shafts. B.H.P. : 4,050 = 41 kts. (*light*)

*Notes.*—Former U.S. Navy craft built U.S.A. 1945 transferred to R.O.K.N. Jan. 1952. Elco type ex-PTs 616, 619, 620 armed with machine guns and rocket launchers. *Jebby* PT 27 (ex-U.S.S. PT 613) was destroyed while on loan to Republic of Korea Sep. 1952.

## Gunboats.

**HUKCHOWNAN No. 22** (ex-Japanese) **CHUNG MUKONG I PG 313**  
**CHUNG MUKONG II PG 315**

## Patrol Boats.

No. 1 No. 2 No. 3 No. 4 No. 6 No. 7 No. 8 No. 10

## Landing Ships.

**CHONGHO LST 801** **ANDONG LST 803** **LST 805**  
**ULSAN LST 802** **LST 806**

*Note.*—Former United States Landing Ships.

**CHUNG JIN LSIL 105** **LSSL 107** (ex-LSSL 77) **LSSL 109** (ex-LSSL 54)  
**LSSL 108** (ex-LSSL 91) **LSSL 110** (ex-LSSL 86)

*Note.*—Former United States Support Landing Ships Large, LSSL, ex-LCS(L).

## Oilers.

**CHUN-JI** (ex-Birk) **PUJON** (ex-Hassel)  
 Measurement : 2,257 and 2,256 tons *gross*, respectively  
 Dimensions : 275 (pp.), × 44½ × 18½ feet

*Notes.*—Former Norwegian tankers. Both built at Bergen (Norway) at the A 5 Berken Mek. Verks in 1951. Taken over by South Korean naval authorities at Rotterdam Sep. and July 1953, respectively.

**KURYONG YO 106**

*Note.*—Ex-United States self-propelled fuel oil barge.

## Oceangoing Tug.

**LTJ** (ex-U.S. Army LT 34 or LT 134)

## Harbour Tugs.

No. 1 No. 4 No. 5 No. 9

## Supply Ships

**HAN YANG**

*Note.*—Dedicated by President Rhee at Pusan where she was built in 1951.

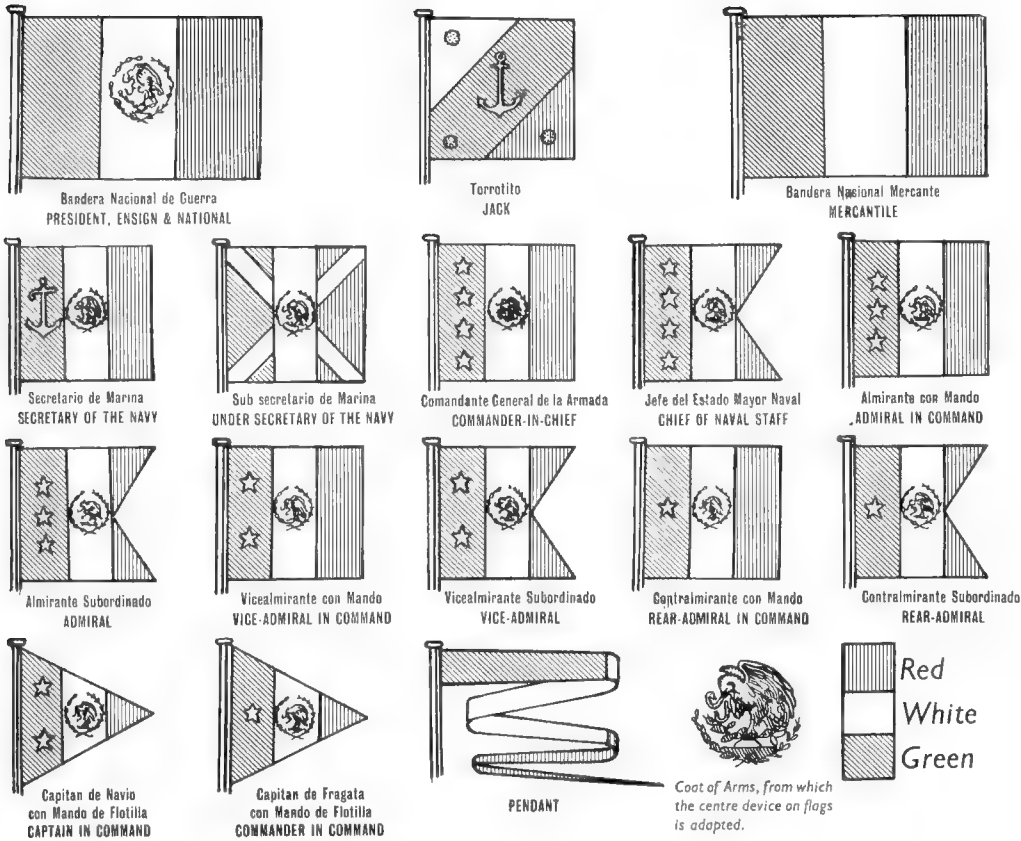
**NAMWONHO FS 901** **YOJUHO FS 903** **CHUNGU FS 906**  
**KIMHAEHO FS 902** **WAEKWANHO FS 905**

*Note.*—All ex-U.S. Army FS craft.



MEXICO

Flags.



Administration.

Secretary of the Navy : Brigadier General Rodolfo Sánchez Taboada  
Under-Secretary : Engineer Alberto J. Pawling.  
Comandante-General of the Navy : Admiral Mario Rodriguez Malpica  
Chief of the Naval Staff : Vice-Admiral Luis M. Bravo Carrera

Naval Estimates.

1951, \$31,800,000. 1952, \$37,060,912.50

Uniforms.

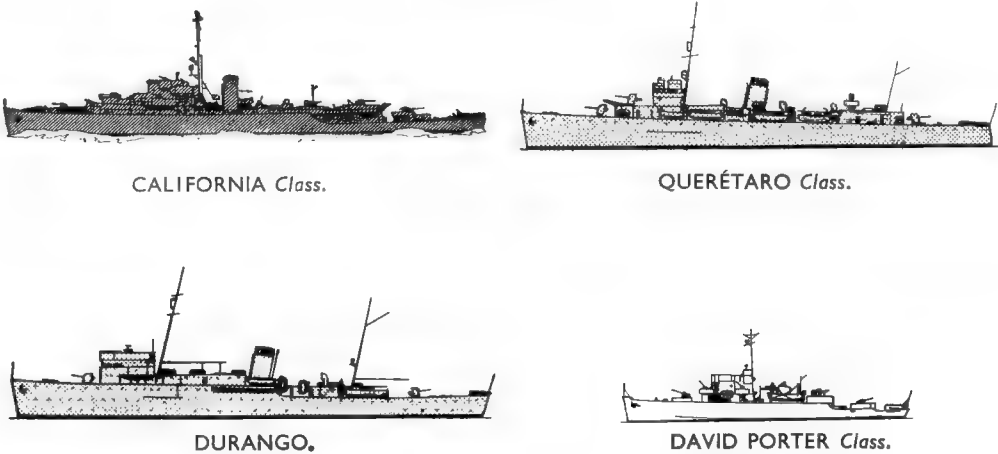


Note.—The rank of Comodoro( Commodore) was abolished in 1952.

Personnel.

8,000 officers and men, including marines.

Silhouettes.



Mercantile Marine.

Lloyd's Register appendix, 1954 : 84 vessels of 163,781 tons gross.

Frigates.



USAMACINTA.

1953, Official

**CALIFORNIA** (ex-Hutchinson) **PAPALOAPAN** (ex-Gladwyne) **TEHUANTEPEC** (ex-Bangor) **USUMACINTA** (ex-Annapolis)  
Displacement : 1,430 tons (2,415 tons full load)  
Dimensions : 285½ (w.l.) 304 (o.a.) × 37½ × 13½ feet  
Guns : 2—3 inch, 50 cal., 2—20 mm. AA.  
Machinery : Triple expansion. 2 shafts. I.H.P. : 5,500 = 19 kts.  
Boilers : 2, of 3-drum type  
Oil fuel : 290 tons

Notes.—Purchased in 1947. Former United States patrol frigates of "Tacoma" class.

Name	Builders	Laid down	Launched	Completed
California	Consolidated Steel, San Pedro	28 July 1943	27 Aug. 1943	3 Feb. 1944
Papaloapan	Globe S.B.Co., Superior, Wis.	14 Oct. 1943	7 Jan. 1944	18 Aug. 1944
Tehuantepec	American S.B.Co., Lorain, Ohio		6 Nov. 1943	22 Aug. 1944
Usumacinta	American S.B.Co., Lorain, Ohio		16 Oct. 1943	4 July 1944



QUERÉTARO.

1951, Official.

GUANAJUATO

POTOSI

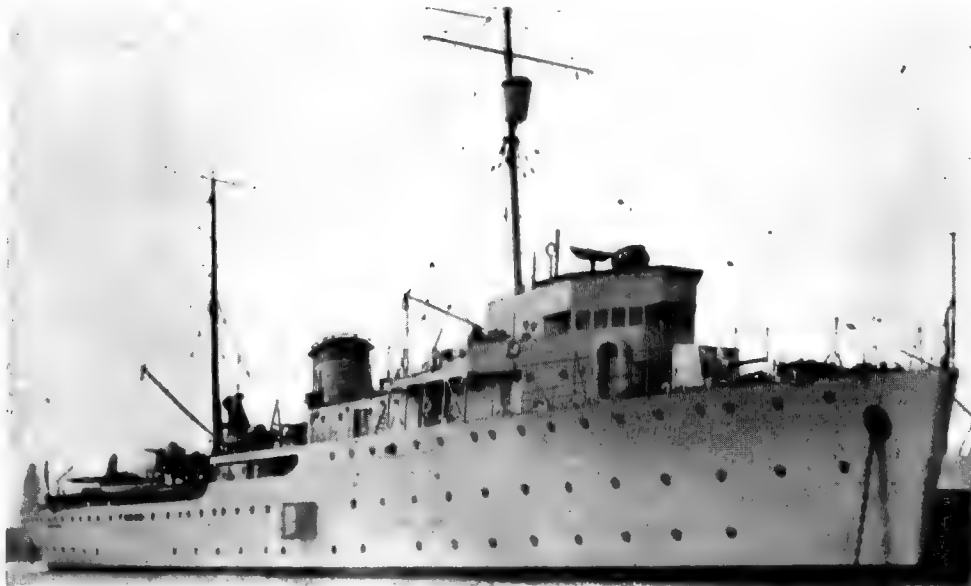
QUERETARO

Displacement : 1,300 tons standard  
Dimensions : 264 (o.a.) × 37½ × 10 feet  
Guns : 3—4 inch, 6—20 mm. AA. (twin) (Guanajuato, 4—25 mm., 1—20 mm., Querétaro, 2—57 mm., 2—20 mm., 2—13 mm. AA.), 8—13 mm. AA., 4 D.C.T.  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 5,000 = 20 kts.  
Boilers : Yarrow  
Complement : 140. Can carry 230 men and 20 horses in addition.

Frigate (and Transport)

Classed as *Transportes-Canoneros*.

I "Durango" Type.



1951, Official.

DURANGO

Builders : Union Naval de Levante, Valencia  
Launched : 28 June, 1935  
Completed : 1936  
Displacement : 1,600 tons standard, (1,950 tons full load)  
Dimensions : 282 (p.p.), 303 (o.a.) × 40 × 10 feet  
Guns : 2—4 inch, 2—57 mm., 2—25 mm. AA. (twin mounts), 2—13 mm. AA.  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 6,500 = 20 kts. designed (19 kts. sea speed)  
Boilers : 2 Yarrow  
Oil fuel : 140 tons  
Radius : 3,000 miles at 15 kts.  
Complement : 141

Notes.—Accommodation for 20 officers, 450 men, 80 horses. Designed primarily as an armed transport, this vessel carries a weaker armament than the three *canoneros* of the "Guanajuato" class (see illustration at bottom of adjacent column) which besides their troop carrying and transport capacity are equivalent to frigates in many ways. A sister ship of the *Durango*, the *Zacatecas*, was taken over by the Spanish Navy on completion as a gunboat or frigate and renamed *Calvo Sotelo*.

Name	Builders	Launched
Guanajuato	Sociedad Español de Construcción Naval, Ferrol	29 May, 1934
Potosi	S.E. de C.N., Matagorda, Cadiz	24 Aug., 1934
Queretaro	S.E. de C.N., Ferrol	29 June, 1934

MEXICO—Patrol Vessels, etc.

Escort Patrol Vessels (Classed as *Guardacostas*).



PEDRO SAINZ DE BARANDA. 1950, J. Meister.

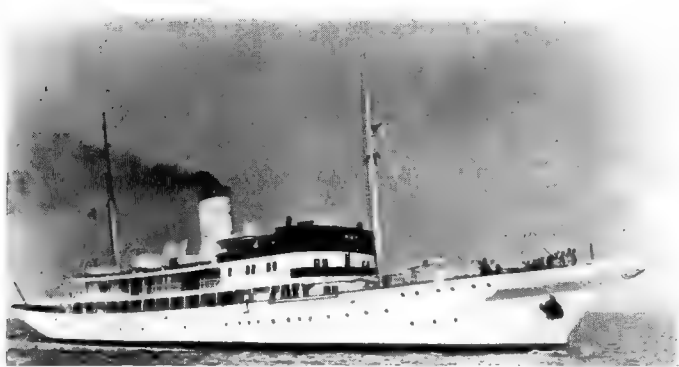
**BLAS GODINEZ** (ex-PCE 871)  
**DAVID PORTER** (ex-PCE 847)  
**PEDRO SAINZ DE BARANDA** (ex-PCE 844)

**TOMÁS MARÍN** (ex-PCE 875)  
**VIRGILIO URIBE** (ex-PCE 868)

Displacement : 600 tons (903 tons full load)  
Dimensions : 180 (w.l.), 184½ (o.a.) × 33 × 9½ feet  
Guns : 1—3 inch, 50 cal., 6—40 mm. AA., 4—20 mm. (except *Virgilio Uribe*), 4 D.C.T. (*Blas Godinez*, 1—3 inch, 3—40 mm. AA., 5—20 m.m. AA.)  
Machinery : G.M. Diesel. B.H.P. : 1,800 = 20 kts. (15½ kts. sea speed)

Note.—Purchased from U.S.N. 1947.

Training Ship (*Buque Escuela*).



ZARAGOZA (ex-*Orizaba*, ex-*Southern Cross*, ex-*Rover*) 1953, Official.

Launched : 1930  
Displacement : 1,851 tons  
Thames measurement : 2,113 tons  
Dimensions : 266½ (w.l.), 320½ (o.a.) × 40½ × 14½ feet  
Guns : 2—13 mm. AA.  
Machinery : Triple expansion. I.H.P. : 2,600 = 11 kts.  
Boilers : 3 cylindrical  
Oil fuel : 380 tons  
Complement : 150

Notes.—Built in Glasgow, Scotland. Acquired from Germany 1939. Ex-Presidential yacht.

Patrol Boats.  
9 “GC 30” Class.



GC 30. 1953, Official.  
GC 30 (ex-PC 820) GC 33 (ex-PC 813) GC 36 (ex-PC 1224)  
GC 31 (ex-PC 608) GC 34 (ex-PC 794) GC 37 (ex-PC 819)  
GC 32 (ex-PC 614) GC 35 (ex-PC 824) GC 38 (ex-PC 1210)

Displacement : 280 tons (450 tons full load)  
Dimensions : 170 (w.l.), 173½ (o.a.) × 23 × 7½ (11 max.) feet  
Guns : 1—3 inch, 1—40 mm. AA., 5—20 mm. AA.  
Machinery : 2 Diesels. 2 shafts. B.H.P. : 2,880 = 19 kts. (max.).  
Complement : 65

Notes.—Launched 1942-44. Completed in U.S.A. 1942-45. Purchased in United States 1952. Cruising speed 10 kts.

3 “G” 20 Class.



G 28. 1954, Official.  
G 22 G 25 G 28  
Displacement : 130 tons standard (184 tons full load)  
Dimensions : 147½ (pp.), 153 (w.l.), 156 (o.a.) × 16½ × 5½ feet (mean)  
Guns : 2—20 mm. AA., 2 D.C.T.  
Machinery : M.A.N. Diesels. 2 shafts. B.H.P. : 3,000 = 24 kts. (now less)  
Complement : 26

Notes.—Launched 1934-35. Though of British design, these vessels were built in Spain, by *Compania Euskalduna de Construcción, Eilbao*, with German engines and bullet-proof hull plating and were originally armed with French guns. G 20, G 21, G 23, G 26 and G 27 withdrawn from service 1954.

HALCON

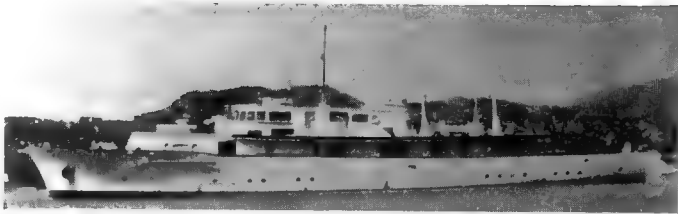
Displacement : 83 tons  
Dimensions : 85 × 14 × 5 feet  
Guns : 2 M.G.  
Machinery : 2 sets Diesels. B.H.P. : 800 = 20 kts.

Notes.—Rated as Patrol Launches. *Halcon* built at S. Diego, Calif. ; launched 20 Aug., 1941. *La Paz* was wrecked. The patrol vessels (trawlers) *Acapulco* and *Veracruz* were withdrawn from service in 1953-54.

NEREIDA

Displacement : 83 tons  
Dimensions : 85 × 14 × 5 feet  
Guns : 2 M.G.  
Machinery : 2 sets Diesels. B.H.P. : 800 = 20 kts.

Presidential Yacht.



SOTAVENTO. 1951, Official.

SOTAVENTO

Builders : Higgins, New Orleans  
Launched : 1947  
Displacement : 400 tons full load  
Dimensions : 165½ × 27½ × 9½ feet  
Machinery : Diesel engines. B.H.P. : 1,800 = 17 kts.

Notes.—Handsome, symmetrical and low-lying, streamlined, truncated funnel, air conditioned, equipped with radar.

Tugs.

FRANCISCO NICOLAU

Displacement : 85 tons  
Dimensions : 68 × 16 × 7 feet  
Machinery : Diesel. B.H.P. : 165 = 7.5 kts.

Notes.—Built in Mexico 1946. Lighthouse tender.



RIO BLANCO. 1951, Official.

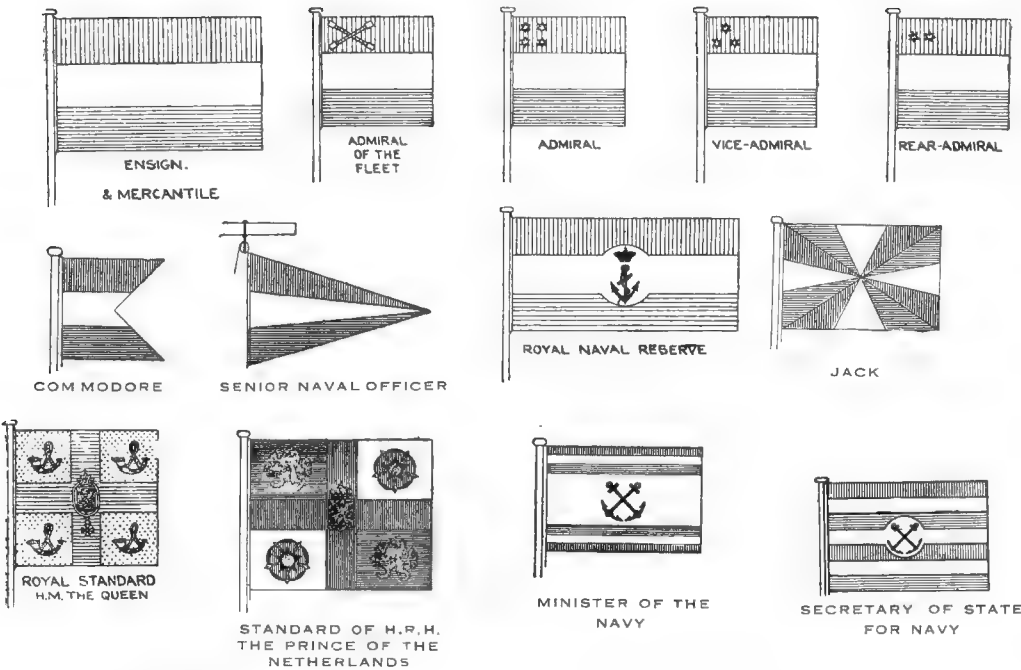
RIO BLANCO

Displacement : 100 tons  
Dimensions : 64 × 16 × 6 feet  
Machinery : Diesel. B.H.P. : 450 = 9 kts.

Notes.—Built in Canada. Rated as *Buque Auxiliar*

NETHERLANDS

Flags.



Royal Standard  
H.R.H. The Crown Princess } Colours of these are Nassau blue (dark blue) and deep orange.

Governors of New Guinea, of Surinam and of Curacao: Three white balls replace stars, in flag of Vice-Admiral's type.  
Commodore's flag is also used for Captain Commanding Squadron.  
Officers Commanding Flotillas fly a red pendant with capital F in white.  
Officers Commanding Squadrons fly a white pendant with capital S in red.  
Officers Commanding Divisions fly a blue pendant with capital D in yellow.

Administration.

Minister of the Navy : Ir. C. Staf.  
Secretary of State for the Navy : Vice-Admiral H. C. W. Moorman.  
Commander-in-Chief and Chief of Naval Staff : Vice-Admiral A. de Booy, O.B.E.

Naval Attaché, London : Captain P. A. Mulock van der Vlies Bik, C.V.O., R.Neth.N.

Uniforms.



Admiraal. Luitenant-Admiraal. Vice-Admiraal. Schout by-nacht. Com-mandeur. Kapitein ter Zee. Kapitein Luitenant ter Zee. Luitenant ter Zee 1e Kl. Luitenant ter Zee 2e Kl. Luitenant ter Zee 3e Kl. Lieut. Sub-Lieut. Adelborst der 1e Kl.

After about a century, the rank of Commodore (Commandeur), temporary rank between Captain and Rear-Admiral, was re-established on July 1, 1949, for officers appointed to special posts.

Branch distinctions are as follows :

- Executive Officers : Foul anchor and crown in gold on lapel.
- Air Officers : Propeller and crown in gold on lapel.
- Engineer Officers : Torch, crossed by two arrows, and crown in gold on lapel.
- Electrical Officers : Arrow, crossed by two lightning flashes, and crown in gold on lapel.
- Supply and Secretariat Officers : Foul anchor and crown in silver on lapel.
- Medical Officers : Staff of Aesculapius and crown in gold on lapel.
- Dental Officers : Staff of Aesculapius and crown in silver on lapel.
- Pharmacist Officers : Double staff of Aesculapius and crown in silver on lapel.
- Branch Officers : Two crossed foul anchors and crown in gold on lapel.
- Special Service Officers : Foul anchor and crown in gold on lapel, and green cloth between stripes.
- Cypher Officers : Foul anchor and crown in gold on lapel and green cloth between stripes.
- Pilot Service Officers : Foul anchor and crown in gold on lapel and light blue cloth between stripes.
- W.R. Neth. N.S. Officers : Foul anchor and crown in blue on lapel and blue stripes.
- Chaplains : Cross sided by laurel leaves in gold on lapel and stripes without curl.

Navy Estimates.

1947 : Fl. 375,007,220	1949 : Fl. 323,771,380	1951 : Fl. 270,000,000	1953 : Fl. 323,000,000
1948 : Fl. 327,224,589	1950 : Fl. 314,807,510	1952 : Fl. 347,200,000	1954 : Fl. 325,000,000

Personnel.

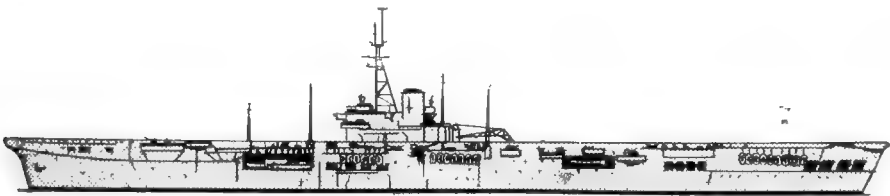
About 22,800 officers and ratings (including about 4,000 officers and men of the Royal Marines)

Ships.

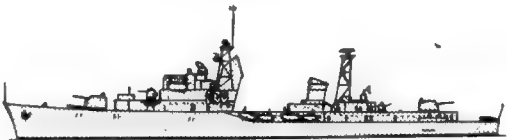
Colour of warships is greyish blue, except submarines, which are painted dark green in home waters.  
Ships of the Royal Netherlands Navy are referred to with the prefix "Hr. Ms."

Mercantile Marine.

Lloyd's Register appendix, 1954 : 1,650 vessels of 3,373,571 tons gross.



KAREL DOORMAN.



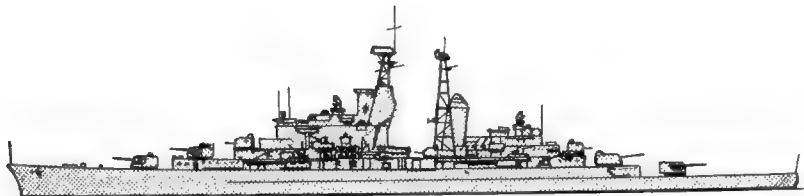
LIMBURG Type.



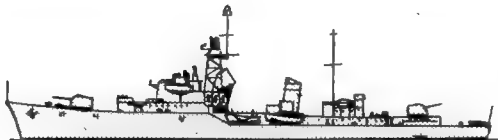
VAN GALEN.



BATJAN Class.



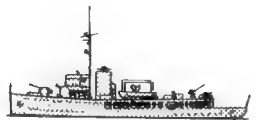
DE RUYTER (DE ZEVEN PROVINCIEŒ less pronounced curve to bow).



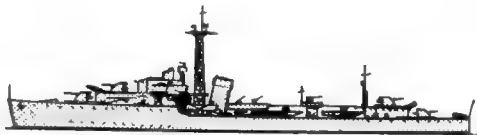
HOLLAND Type.



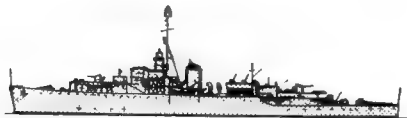
MARNIX.



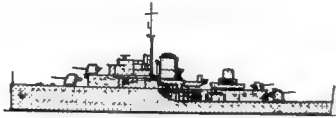
JAN VAN BRAKEL.



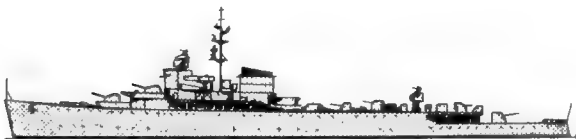
EVERTSEN.



JOHAN MAURITS.



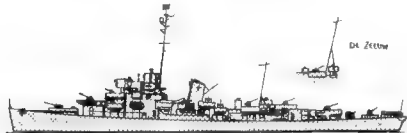
FLORES.



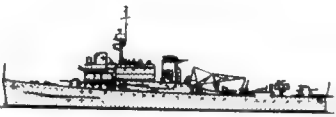
JACOB VAN HEEMSKERCK.



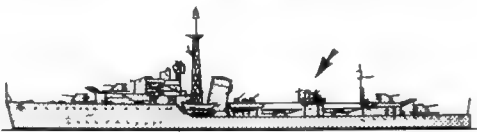
PIET HEIN.



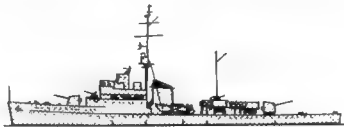
VAN ZIJLL (DE ZEEUW inset)



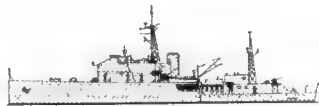
WILLEM VAN DER ZAAŒ.



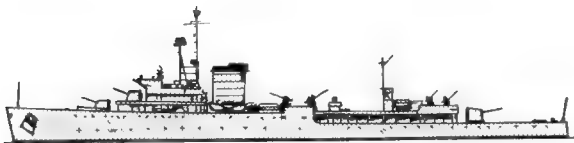
KORTENAER.



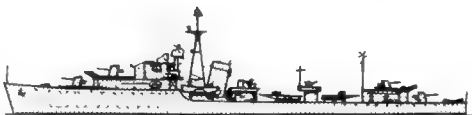
VAN SPEIJK.



SOEMBA.



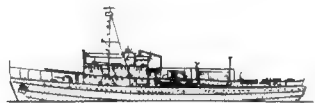
TROMP



BANCKERT.



VAN KINSBERGEN.



SNELLIUS Class.



# Light Aircraft Carrier (Vliegkampschip).

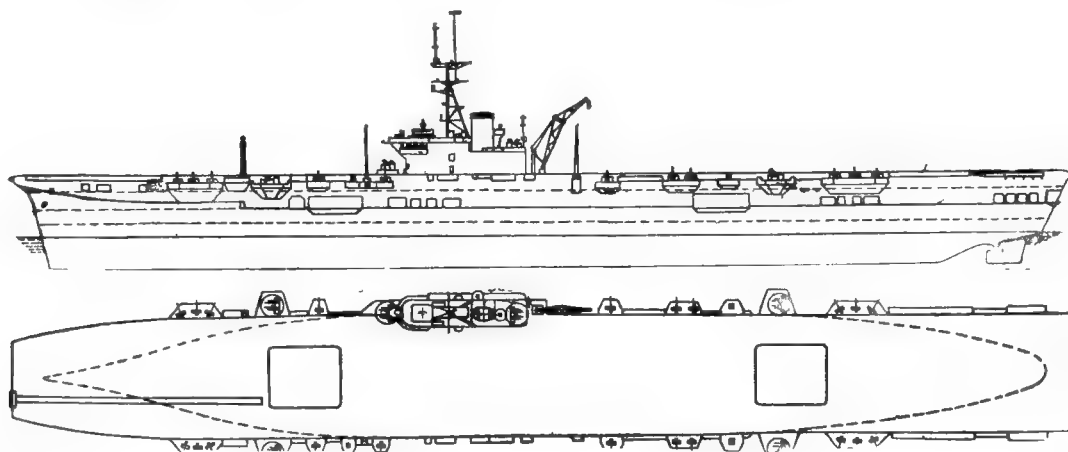


1950, Wright & Logan.

## KAREL DOORMAN (ex-H.M.S. Venerable)

Builders : Cammell Laird & Co., Ltd., Birkenhead  
Laid down : 3 Dec., 1942  
Launched : 30 Dec., 1943  
Completed : 17 Jan., 1945

Displacement : 13,190 tons standard (18,045 tons full load)  
Dimensions : Length : 630 (pp.), 693½ (o.a.) feet. Beam : 80 feet. Width overall : 112½ feet.  
Draught : 21½ (mean), 23½ (max.) feet  
Guns : 24—40 mm. AA., 10—20 mm. AA., 4—3 pdr. saluting  
Aircraft : 19 (Capacity 39 to 44) and at least 1 helicopter included in her equipment  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 42,000 = 25 kts. (designed), 24-25 kts. sea speed.  
Boilers : 4, of 3-drum type, 400 lb. working pressure, 700 degrees maximum superheat  
Complement : 1,300



General Notes.—Purchased from Great Britain April 1, 1948. Commissioned in the Royal Netherlands Navy, May 28, 1948. Insulated for tropical service and partly air-conditioned. Pendant No. R 81. Will be modernised in 1954-55, including a heavier flight deck, at the Wilton-Fijenoord Shipyard, at a cost of 11 million guilders.

Constructional Notes.—Sponsons can be dismantled to the extent of 3½ feet on either side if necessary to allow for passage through the Panama Canal. Dimensions of hangar are : Length, 445 feet ; width, 52 feet ; clear depth, 17½ feet.

Engineering Notes.—Engines and boilers are arranged en echelon, the two propelling-machinery spaces having two boilers and one set of turbines in each space, on unit system.

# Cruisers (Kruisers).



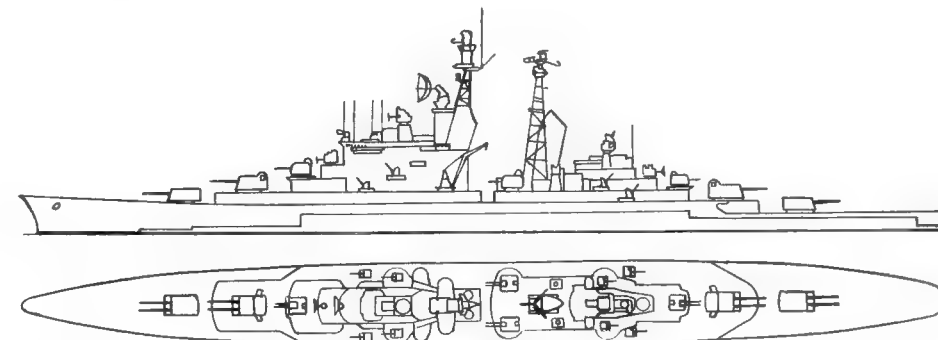
DE ZEVEN PROVINCINIEN, (photo of De Ruyter on next page)

1954, Wright & Logan.

## DE RUYTER (ex-De Zeven Provinciën)

## DE ZEVEN PROVINCINIEN (ex-De Ruyter, ex-Eendracht, ex-Kijkduin)

Displacement : 5,664 tons standard (11,926 tons full load)  
Dimensions : Length : 590½ (pp.), 614½ and 609 (o.a.) feet, respectively. Beam : 56½ feet.  
Draught : 18½ (mean), 22 (max.) feet  
Guns : 8—6 inch (Bofors 1942 model), 8—57 mm. AA. (in pairs), 8—40 mm. AA  
Armour : 3"-2" side ; 4", 2½"-2" turrets.  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 78,000 = 32 kst.  
Boilers : 4, of 3-drum type  
Complement : 973



Note to Plan.—Shape of bow differs in the two ships, hence variation in overall length.

General Notes.—Machinery by K. M. de Schelde. Construction resumed in 1946. De Zeven Provinciën on sea trials early 1953. De Ruyter was launched by the Germans as the De Zeven Provinciën, but as the latter name was given to the former De Ruyter when she was launched by Queen Juliana on Aug. 22, 1950, the war-launched ship took her sister's name in exchange. De Ruyter commissioned 18 Nov. 1953, De Zeven Provinciën 17 Dec. 1953.

Gunnery Notes.—Main armament has 60 degrees elevation.

Appearance Notes.—Tripod mast, originally abaft after funnel, is now before after funnel, as in British " Belfast " type.

Pendant No.	Name	Builders	Laid down	Launched	Completed
C 801	De Ruyter	Wilton-Fijenoord, Schiedam	5 Sep. 1939	24 Dec. 1944	18 Nov. 1953
C 802	De Zeven Provinciën	Rotterdam Drydock Co.	19 May 1939	22 Aug. 1950	17 Dec. 1953

NETHERLANDS—Light Cruisers

Cruisers—continued.



DE RUYTER (see preceding page).

1954, R.N.N., Official.

Anti-Aircraft Cruiser.



JACOB VAN HEEMSKERCK.

1951, Official.

JACOB VAN HEEMSKERCK

Builders : Nederlandsche Scheepsbouw Mij., Amsterdam  
Laid down : 31 Oct., 1938  
Launched : 16 Sep., 1939  
Completed : 10 May 1940

Displacement : 3,350 tons standard (4,120 tons full load)  
Dimensions : Length : 426½ (pp.), 433 (o.a.) feet. Beam : 40½ feet. Draught : 18 feet (max.)  
Guns : 10—4 inch AA., 8—40 mm. AA., 8—20 mm. AA.  
Armour : 1½" deck, 2½" side  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 56,000 = 32 kts. (35 kts. on trials)  
Boilers : 4 Yarrow  
Oil fuel : 860 tons  
Radius : 5,000 miles at 10 kts. ; 1,400 miles at 32 kts.  
Complement : 393

Notes.—Commissioned May 10, 1940, and converted into an AA. cruiser in a British dockyard (Portsmouth). Was originally designed as identical sister ship to Tromp. Pendant No. : C 803

Light Cruiser.



TROMP

1954, Wright & Logan.



TROMP.

1954, Wright & Logan.

TROMP

Builders : Nederlandsche Scheepsbouw Mij., Amsterdam  
Laid down : 17 Jan., 1936  
Launched : 24 May, 1937  
Completed : 18 Aug., 1938

Displacement : 3,350 tons standard (4,215 tons full load)  
Dimensions : Length : 426½ (pp.), 433 (o.a.) feet. Beam : 40½ feet. Draught : 18 feet (max.)  
Guns : 6—5.9 inch, 50 cal. (Bofors), 4—3 inch AA., 8—40 mm. AA. (Bofors), 2—20 mm. AA. (Oerlikon)  
Armour : 1½" deck, 2" side  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 56,000 = 30 kts. (35 kts. on trials)  
Boilers : 4 Yarrow  
Oil fuel : 860 tons  
Radius : 5,000 miles at 10 kts. ; 1,400 miles at 30 kts.  
Complement : 428

Notes.—Machinery by Werkspoor. Refitted 1949. The armament originally included 6—21 inch torpedo tubes and 4 D.C.T., and she carried 1 aircraft handled by derrick. Pendant No. C 804

## Escort Destroyers (DDE).

### 12 Anti-Submarine Type (New Construction).

2 Koninklijke Maatschappij De Schelde, Flushing

**LIMBURG** **UTRECHT**

4 Nederlandse Dok en Scheepsbouw Mij., Amsterdam

**AMSTERDAM** **FRIESLAND**  
**DRENTHE** **GRONINGEN**

Displacement : 2,476 tons standard (3,070 tons full load)  
Dimensions : 370 (pp.), 380½ (o.a.) × 38½ × 13 feet  
Guns : 4—4.7 inch, 6—40 mm. AA.  
Machinery : Geared turbines. 2 shafts. S.H.P. : 60,000 = 36 kts.  
Complement : 283

Notes.—Six anti-submarine destroyers were ordered in March, 1948. A further batch of six were ordered in Jan. 1950. To be completed in 1954-56. Will have some side armour as well as deck protection; squids; no torpedo tubes. Referred to in Netherlands as "Submarine Chasers." Named after provinces, Northern and Southern Holland, and two biggest towns. Friesland and Groningen are Type 47B, remaining six are Type 49.



HOLLAND (leaving for first sea trials).

1954, R.N.N., Official.

1 Rotterdamse Droogdok Mij., Rotterdam

**HOLLAND**

1 Dak-en-Werfmaatschappij Wilton-Fijenoord, Schiedam

**GELDERLAND**

Displacement : 2,164 tons standard (2,765 tons full load)  
Dimensions : 360½ (pp.), 371 (o.a.) × 37½ × 12½ feet  
Guns : 4—4.7 inch  
Machinery : Geared turbines. 2 shafts. S.H.P. : 45,000 = 32 kts.  
Complement : 246

2 Koninklijke Maatschappij De Schelde, Flushing

**NOORD BRABANT**  
**ZEELAND**

Notes.—This type 47A will be equipped with the turbines originally built before the Second World War for the destroyers of the "Gerard Callenburgh" class then under construction. In May 1940 these turbines fell into German hands, but in 1945 they were recovered, as the destroyers which the Germans ordered to be built by Netherlands shipbuilding yards and would have been fitted with these turbines were never built.

Pendant No.	Name	Laid down	Launched	Completed	
D 808	Holland	21 Apr. 1950	11 Apr. 1953	1955	Type 47A
D 809	Zeeland	12 Jan. 1951	27 June 1953	1955	
D 810	Noord Brabant	1 Mar. 1951	28 Nov. 1953	1955	
D 811	Gelderland	10 Mar. 1951	19 Sep. 1953	1955	
D 812	Friesland	17 Dec. 1951	21 Feb. 1953	1955	Type 47B
D 813	Groningen	21 Feb. 1953	9 Jan. 1954	1955	
D 814	Overijssel	19 Sep. 1953	1954	1955	
D 815	Limburg	28 Nov. 1953	1954	1955	
D 816	Drente	9 Jan. 1954	1954	1955	
D 817	Rotterdam	7 Jan. 1954	1954	1955	
D 818	Utrecht	1 Feb. 1954	1955	1956	
D 819	Amsterdam	1954	1955	1956	

## Destroyers.

### 3 "Evertsen" Class.



EVERTSEN.

1954, R.N.N., Official.



KORTENAER.

1954, Skyfotos.

**EVERTSEN** (ex-Scourge)

**KORTENAER** (ex-Scorpion, ex-Sentinel)

**PIET HEIN** (ex-Serapis)

Displacement : 1,710 tons (2,525 tons full load)  
Dimensions : 362½ × 35½ × 10 feet  
Guns : 4—4.7 inch, 2—40 mm. AA., 8—20 mm. AA. (Kortenaar, 4—2 pdr., 6—20 mm.)  
Tubes : 8—21 inch (quadrupled)  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 40,000 — 36 kts. (designed), 30.75 kts. on trials  
Boilers : 2, of 3-drum type  
Complement : 229-230

Notes.—Purchased from Great Britain 1945-46. Evertsen commissioned in R.N.N. Feb. 1, 1946. Kortenaar Oct. 1, 1945. Piet Hein Oct. 5, 1945. Names are those previously borne by destroyers lost in action in the East Indies, 1942.

Pendant Nos.	Name	Builders	Laid down	Launched	Completed
D 802	Evertsen	Cammell Laird & Co., Ltd., Birkenhead	26 Jun., 1941	8 Dec., 1942	14 Jul., 1943
D 804	Kortenaar	Cammell Laird & Co., Ltd., Birkenhead	19 Jun., 1941	26 Aug., 1942	11 May, 1943
D 805	Piet Hein	Scotts S.B. & Eng. Co., Ltd., Greenock	14 Aug., 1941	25 Mar., 1943	23 Dec., 1943

NETHERLANDS—Destroyers and Frigates

Destroyers



1953, Official.

BANCKERT (ex-Quilliam)

Displacement : 1,725 tons (2,440 tons full load)  
Dimensions : 358½ × 35½ × 9½ feet  
Guns : 4—4.7 inch, 4—40 mm. AA., 6—20 mm. AA., 4—2 pdr.  
Tubes : 8—21 inch (quadrupled)  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 40,000 = 36.75 kts. designed, 32 kts. sea  
Boilers : 2, of 3-drum type  
Complement : 240

Notes.—Purchased from Great Britain, 1945. Name is that previously borne by destroyer lost in action in the East Indies, 1942. Commissioned in R.N.N. Nov. 21, 1945.



1951, Official.

VAN GALEN (ex-Noble)

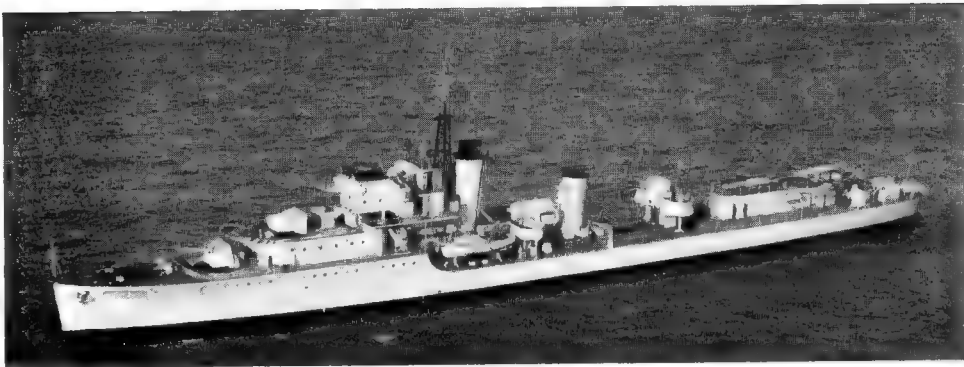
Displacement : 1,760 tons (2,523 tons full load)  
Dimensions : 348 × 35 × 9 feet  
Guns : 6—4.7 inch, 4—40 mm. AA., 6—20 mm. AA.  
Tubes : 5—21 inch (quintupled)  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 40,000 = 36 kts. designed, 31 kts. sea  
Boilers : 2, of 3-drum type.  
Complement : 256

Notes.—Purchased from Great Britain in 1940. Sister ship *Tjerk Hiddes* was transferred to the Indonesian Navy on 1 Mar., 1951.

Pendant No.	Name	Builders	Laid down	Launched	Completed
D 801	Banckert	R. & W. Hawthorn, Leslie & Co., Ltd., Hebburn	19 Aug. 1940	29 Nov. 1941	22 Oct. 1942
D 803	Van Galen	Wm. Denny & Bros., Ltd., Dumbarton	10 July 1939	17 Apr. 1941	20 Feb. 1942

Frigates (Fregatten).

I Ex-British A/S Training Destroyer.



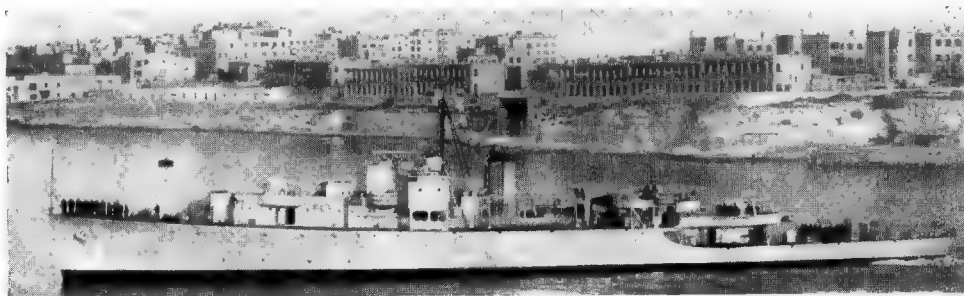
1951, Skyfotos

MARNIX (ex-H.M.S. Garland)

Builders : Fairfield S.B. & Engineering Co. Ltd., Glasgow.  
Launched : 24 Oct., 1935  
Displacement : 1,335 tons (2,030 tons full load)  
Dimensions : 312 (pp.), 323 (o.a.) × 33 × 8½ (mean) feet  
Guns : 2—4 inch, 6—20 mm. AA. Oerlikon, 4 D.C.T.  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 34,000 = 34 kts. (30 kts. sea speed)  
Boilers : 3, of 3-drum type  
Oil fuel : 455 tons  
Complement : 200

Notes.—Former British destroyer. Served with distinction under Polish flag for greater part of war. Purchased by Netherlands in Dec., 1947. Underwent complete refit at the Nederlandse Dok en Scheepsbouw Mij. at Amsterdam, 1948-49. Commissioned Jan. 16, 1950, as seagoing anti-submarine training destroyer and training ship for engine-room personnel. Has box-like clinker screen on fore funnel. Reclassified as a frigate in 1953. Now carries pendant No. F 801.

I Ex-British "River" Class.



1953, A. & J. Pavia.

JOHAN MAURITS VAN NASSAU (ex-Ribble)

Builders : Wm. Simons & Co. Ltd. Renfrew  
Laid down : 29 Dec., 1941  
Launched : 23 Apr., 1943  
Completed : 25 June, 1943  
Displacement : 1,463 tons (2,125 tons full load)  
Dimensions : 301½ × 36½ × 14½ feet  
Guns : 2—4.1 inch, 2—40 mm. AA., 5—20 mm. Oerlikon  
Machinery : 2 sets 4-cyl. triple expansion. 2 shafts. I.H.P. : 5,500 = 20 kts.  
Boilers : 2, of 3-drum type  
Complement : 186

Notes.—"River" class. Purchased by Royal Netherlands Navy, June 25, 1943, on completion in Great Britain. Pendant No. F 802

6 "De Bitter" Class (Ex-U.S. DE Type).



VAN AMSTEL.

1954, Official.



DUBOIS.

1954, R.N.N., Official.

**DE BITTER** (ex-Rinehart, DE 196)  
**DE ZEEUW** (ex-Eisner, DE 192)

**DUBOIS** (ex-O'Neill, DE 188)  
**VAN AMSTEL** (ex-Burrows, DE 195)

**VAN EWWIJCK** (ex-Gustason, DE 182)  
**VAN ZIJLL** (ex-Stern, DE 187)

Displacement : 1,250 tons (1,900 tons full load)  
Dimensions : 306 (o.a.) × 37 × 12 (max.) feet  
Guns (original) : 3—3 inch, 50 cal. d.p., 6—40 mm. AA., 18—20 mm. AA., 8 D.C.T. (Some have tubes)  
Machinery : Diesel-electric. B.H.P. : 6,000 = 21 kts.  
Complement : 203-217

Notes.—Ex-United States destroyer escorts acquired under the Mutual Defense Assistance Program. Van Amstel and De Bitter, were commissioned in the R.N.N. 1 June, 1950, and delivered at Den Helder in Aug. 1950. Dubois and Van Ewijk were delivered on 23 Oct. 1950, and De Zeeuw and Van Zijll on 3 May, 1951, at Boston.

Pendant No.	Name	Builders	Launched	Completed
F 807	De Bitter	Federal S.B. & D.D. Co., Port Newark	24 Oct., 1943	19 Dec., 1943
F 810	De Zeeuw		12 Dec., 1943	1 Jan., 1944
F 809	Dubois		14 Nov., 1943	6 Dec., 1943
F 806	Van Amstel	Dravo Corporation, Wilmington, Del.	8 Jan., 1944	12 Feb., 1944
F 808	Van Ewijk		3 Oct., 1943	1 Nov., 1943
F 811	Van Zijll	Federal S.B. & D.D. Co., Port Newark	31 Oct., 1943	1 Dec., 1943

Frigates—continued.



1954, Skyfotos.

**VAN SPEIJK** (ex-K 3)

Builders : P. Smit, Jr., Machinefabrik & Scheepswerf, Rotterdam  
Launched : 22 Mar., 1941  
Displacement : 1,350 tons (1,404 tons full load)  
Dimensions : 246½ (pp.), 255½ (o.a.) × 33½ × 10½ feet  
Guns : 4—4.7 inch, 4—40 mm. AA., 6—20 mm. AA., 2 D.C.T.  
Machinery : 2 sets Sulzer Diesels. B.H.P. : 5,250 = 17.5 kts.  
Oil fuel : 157 tons  
Complement : 213

Notes.—Has been re-engined with different motors, the former diesels of the submarine O 23 which was broken up a few years ago, giving her an increase in speed of 3 knots. Pendant No. F 805. A second ship of this type (ex-K 2), built by Werf Gusto (A. F. Smulders) at Schiedam, was scrapped owing to extensive war damage. A third unit (K 1) also built by P. Smit, Jr., was lost while in German hands.



1954, Official.

**VAN KINSBERGEN**

Builders : Rotterdam Dry Dock Co.  
Laid down : 11 Sep., 1937  
Launched : 5 Jan., 1939  
Completed : 21 Aug., 1939  
Displacement : 2,095 tons standard (2,703 tons full load)  
Dimensions : 338 (o.a.) × 38 × 11 feet  
Guns : 2—4.1 inch (105 mm. German pattern), 3—40 mm., 2—20 mm. AA.  
Machinery : Geared turbines by Gebr. Stork. S.H.P. : 16,000 = 25 kts.  
Boilers : 2 Yarrow  
Oil fuel : 128 tons  
Complement : 213

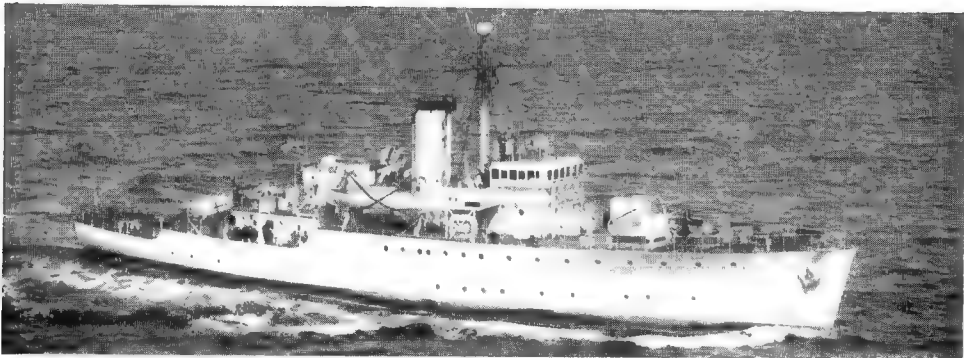
Notes.—Ordered Nov., 1936. Rearmed 1951-52. Main armament formerly comprised 4—4.7 inch guns. Pendant No. F 804.



NETHERLANDS—Frigates

Frigates—continued.

4 “Batjan” Class



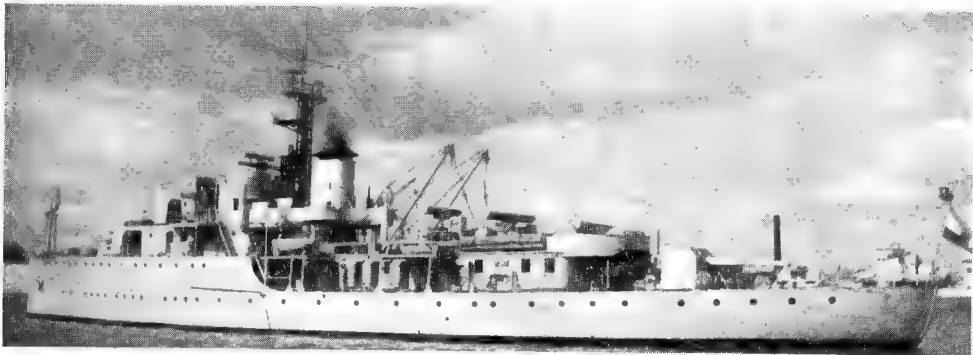
BATJAN.

1954, Skyfotos.

BATJAN (ex-Lismore)	BOEROE (ex-Toowoomba)	CERAM (ex-Burnie)	TERNATE (ex-Kalgoorlie)
Displacement :	815 tons (1,025 tons full load)		
Dimensions :	162 (pp.), 186 (o.a.) × 31 × 8½ feet		
Guns :	1—4 inch (Boeroe and Ternate), 1—4.1 inch (Batjan and Ceram), 1—40 mm. AA., 4—20 mm. AA.		
Machinery :	Triple expansion, 2 shafts. I.H.P. : 1,550-1,750 = 15—15.5 kts.		
Boilers :	2, of 3-drum type		
Complement :	84 to 102		

Notes.—Corvette type. Australian-built, and acquired in 1946. Formerly rated as escort minesweepers. Batjan has open bridge.

Pendant No.	Name	Builders	Launched
F 813	Batjan	Mort's Dock, Sydney	10 Aug., 1940
F 814	Boeroe	Walkers, Maryborough	26 Mar., 1941
F 815	Ceram	Mort's Dock, Sydney	25 Oct., 1940
F 812	Ternate	Broken Hill, Whyalla	7 Aug., 1941



FLORES

Displacement :	1,734 tons
Dimensions :	248 × 37½ × 11½ feet
Guns :	3—5.9 inch, 2—40 mm., 4—20 mm. AA.
Machinery :	2 sets triple expansion. I.H.P. : 2,000 = 15 kts.
Boilers :	4 Yarrow
Oil fuel :	285 tons
Complement :	124

1954, Official.

Notes.—Formerly sloop or gunboat. Launched 15 Aug. 1925, Fijenoord, Rotterdam. Now rated as frigate. Pendant No. F 803.

Frigates—continued.



WILLEM VAN DER ZAAAN

1954, Ted Stone.

Displacement :	1,250 tons standard (1,480 tons full load)
Dimensions :	229½ (pp.), 247 (o.a.) × 36½ × 11 feet
Guns :	2—4.7 inch, 50 cal., 4—40 mm. AA., 4—20 mm. AA., 2 M.G.
Machinery :	2 sets triple expansion. H.P. : 2,500 = 15.5 kts.
Boilers :	2 Yarrow
Complement :	144

Notes.—Laid down 1937 by Netherlands Dry Dock Co. Launched 15 Dec. 1938. Completed Aug. 1939. Former minelayer. Re-rated a frigate early 1953. Pendant No. F 824.



1954, Official.

JAN VAN BRAKEL

Builders :	K. M. Schelde.
Launched :	8 Feb., 1936
Displacement :	950 tons (1,070 tons full load)
Dimensions :	181½ × 30 × 10 (mean), 13 (max.) feet
Guns :	1—4.1 inch, 1—40 mm. AA., 4—20 mm. AA., 8 M.G., 2 rocket projectors, 4 D.C.T.
Machinery :	Triple expansion, 2 shafts. H.P. : 1,600 = 13 kts.
Boilers :	2 Yarrow
Oil fuel :	72 tons
Complement :	88

Notes.—Former patrol vessel converted into a surveying vessel at Surabaya. Commissioned 5 June, 1950. Now officially re-classified as a frigate after re-conversion during 1952-1953 at the Rijkswerf Willemsoord, Den Helder. Pendant No. : F 816.

## Submarines (Onderzeeboten).

○ 32

○ 33

○ 34

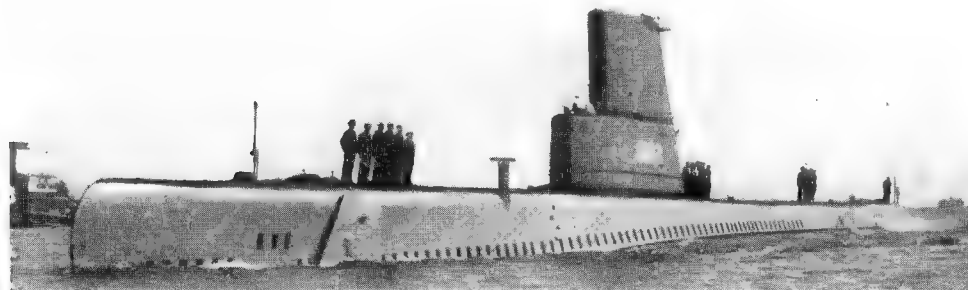
○ 35

Displacement :  
Machinery :

1,000 tons standard  
Diesel. 2 shafts

Note.—4 new submarines, voted for in 1949, are for completion in 1956. Two in hand by Rotterdam Drydock Company and two by Wilton-Fijenoord, Schiedam. Laid down 1953-54.

### 2 "Walrus" (Ex-"Balao") Class. (Converted into "Guppies").



ZEELEEUW.

1954, Wright & Logan.

#### WALRUS (ex-Icefish)

#### ZEELEEUW (ex-Hawkbill)

Displacement : 1,526 tons (2,425 tons submerged)  
Dimensions : 309 (approx) × 27 × 17 feet  
Tubes : 10—21 inch (6 bow, 4 stern). 24 torpedoes.  
Machinery : G.M.2-stroke Diesels. B.H.P. : 6,500 = 20 kts. (surface) ; high submerged speed  
Complement : 80

Notes.—Acquired on loan from U.S. Navy for period of five years. Transferred to Royal Netherlands Navy 21 Feb. and 21 April 1953, respectively.

Pendant No.	Name	Builders	Launched	Converted
S 802	Walrus	Manitowoc	20 Feb., 1944	1952
S 803	Zeeleuw	S. B. Co.	9 Jan., 1944	1952

### 2 "Tijgerhaai" Class.



TIJGERHAAI.

1951, A. & J. Pavia.

#### TIJGERHAAI (ex-Tarn)

#### ZWAARDVIS (ex-Talent)

Displacement : 1,320 tons surface, 1,570 tons submerged  
Dimensions : 273½ × 26½ × 14½ feet  
Guns : 1—4 inch, 2—20 mm. AA.  
Tubes : 11—21 inch (8 bow, 3 stern ; 3 stern and 2 bow tubes are external)  
Machinery : 2 Vickers Diesels. B.H.P. : 2,500 = 15 kts. surface ; H.P. : 1,800 = 8 kts. submerged  
Complement : 63

Notes.—Tijgerhaai and Zwaardvis purchased from Great Britain. Fitted with snort. Tijgerhaai has streamlined asdic dome between the bow hydroplanes. Dolfijn and Zeehond, acquired on loan from Royal Navy, were returned to Great Britain late 1953.

Pendant No.	Name	Builders	Laid down	Launched	Completed
S 812	Tijgerhaai	Vickers-Armstrong, (Barrow)	12 Jun., 1943	29 Nov., 1944	6 Apr., 1945
S 814	Zwaardvisch		13 Oct., 1942	17 Jul., 1943	4 Dec., 1944

## Submarines, Aircraft Direction Ship—NETHERLANDS

### Submarines—continued.

#### 3 "O" Class.



○ 27.

1953, Skyfotos.

#### ○ 21 (ex-K 21)

#### ○ 24 (ex-K 24)

#### ○ 27 (ex-UD 5, ex-O 27, ex-K 27)

Displacement : 962 tons surface; 1,205 tons submerged  
Dimensions : 255 × 21½ × 13 feet  
Guns : 1—3.5 inch (O 24 and O 27), 1—20 mm. AA.  
Tubes : 6—21 inch (4 bow, 2 stern)  
Machinery : 2 Sulzer Diesels, by K. M. de Schelde. B.H.P. : 5,200 = 19.5 kts. surface H.P. : 1,000 = 9 kts. submerged  
Complement : 55

Notes.—O 27 differs slightly in appearance from others, having been completed by the Germans (who renumbered her UD 5), and ultimately commissioned under the Dutch flag on July 13, 1945. Obsolete boats used only for training purposes.

Pendant No.	Name	Builders	Laid down	Launched	Completed
S 801	O 21	K. M. de Schelde	20 Nov., 1937	21 Oct., 1939	10 May, 1940
S 804	O 24	Rotterdam Dry Dock Co.	3 May, 1938	18 Mar., 1940	10 May, 1940
S 807	O 27	Rotterdam Dry Dock Co.	3 Aug., 1939	26 Sep., 1941	1 Nov., 1941

## Aircraft Direction Ship (Vliegtuig-directieschip).



SOEMBA

1953, Wright & Logan

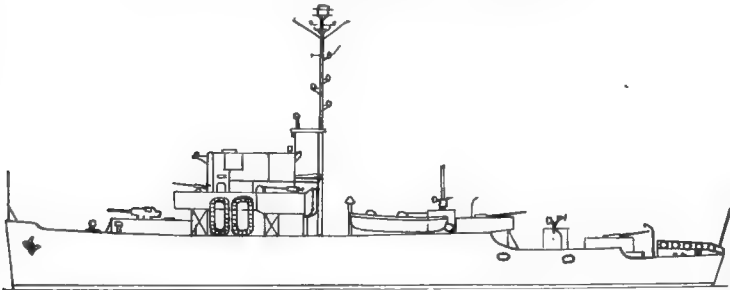
Displacement : 1,680 tons (1,800 tons full load)  
Dimensions : 248 × 37½ × 11½ feet  
Machinery : 2 sets triple expansion. I.H.P. : 2,000 = 15 kts.  
Boilers : 4 Yarrow  
Oil fuel : 285 tons  
Complement : 167

Notes.—Former sloop or gunboat. Launched 24, Aug., 1925 at Wilton Yard, Rotterdam. Converted for radar 1949. Reconstructed as aircraft direction ship at Rijkswerf, Willemsoord, 1950-51, bridge completely redesigned and enlarged. Pendant No. A 891

NETHERLANDS—Patrol Vessels, Minesweepers

Escort Patrol Vessels

7 U.S. PCE Type (Rated as *Frigates*).

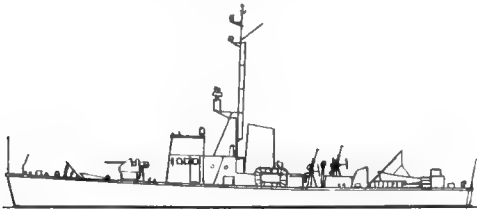


FRET Class 1954, R.N.N. Official.  
F 817 WOLF (ex-PCE 1607) F 819 HERMELYN (ex-PCE 1605) F 821 PANTER  
F 818 FRET (ex-PCE 1604) F 820 VOS (ex-PCE 1606) F 822 JAGUAR  
F 823 LYNX

Displacement : 640 tons standard (903 tons full load)  
Dimensions : 180 (pp.), 184½ (o.a.) × 33 × 9½ feet  
Guns : 1—3 inch, d.p. 6—40 mm. AA., 4—20 mm. AA., D.C.T.  
Machinery : Diesels. 2 shafts. B.H.P. : 2,400 = 16 kts.  
Complement : 54 to 63

Notes.—Built in the U.S.A. under the terms of MDAP. Wolf and Fret completed 1954.

5 U.S. SC Type Submarine Chasers.



BALDER Class. 1954, R.N.N. Official.  
P 812 BALDER P 804 FREYER P 805 HADDA  
P 803 BULGIA P 806 HEFRING

Displacement : 158 tons standard (170 tons full load)  
Dimensions : 114½ (pp.), 119½ (o.a.) × 20½ × 5½ feet  
Guns : 1—40 mm., 3—20 mm.  
Machinery : 2 shafts. S.H.P. : 1,085 = 15 kts.  
Complement : 28

Notes.—Built in Netherlands by Rijkswerf Willemsoord with MDAP funds under off-shore procurement programme. Balder laid down 1 Aug. 1953, launched 24 Feb. 1954.

QUEEN WILHELMINA (ex-U.S.S. PC 468)

Displacement : 300 tons  
Dimensions : 165 (w.l.), 173½ (o.a.) × 23 × 6½ feet  
Guns : 1—3 inch d.p., 1—40 mm. AA., 5—20 mm. AA.  
Machinery : Fairbanks Diesel. 2 shafts. B.H.P. : 2,880 = 20 kts.  
Oil fuel : 60 tons  
Complement : 55

Notes.—Built by Geo. Lawley & Sons, Neponset, Mass., and launched 30 April, 1942. Former United States submarine chaser. Transferred to Netherlands Aug. 1942, under Lease-Lend Act. Rated as Local Patrol Vessel. Pendant No. : P. 801.

Ocean Minesweepers

6 U.S. AM Wooden Type.

- M 884 ONVERSAAGD (ex-AM 480) M 887 ONVERMOEID (ex-AM 484)  
M 885 ONVERSCHROKKEN (ex-AM 483) M 888 ONVERAARD (ex-AM 482)  
M 886 ONBEVREESD (ex-AM 481) M 889 ONVERDROTEN (ex-AM 485)

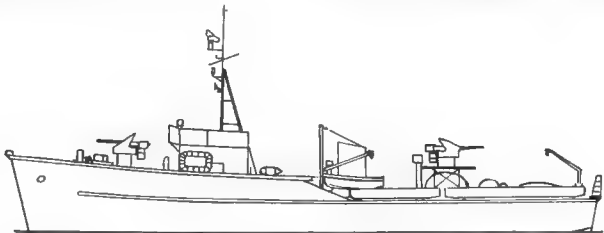
Displacement : 700 tons  
Notes.—Built in U.S.A. for Netherlands under terms of Mutual Defense Assistance Program.

Coastal Minesweepers (*Mijnenvegers*).

14 U.S. AMS Wooden Type.



BEEMSTER Class. 1954, R.N.N. Official.  
M 845 BEEMSTER (ex-AMS 105) M 852 BREUKELN (ex-AMS 100)  
M 846 BOLSWARD (ex-AMS 109) M 853 BLARICUM (ex-AMS 112)  
M 847 BEDUM (ex-Beerta, ex-AMS 106) M 854 BRIELLE (ex-AMS 167)  
M 848 BEILEN (ex-AMS 110) M 855 BRESKENS (ex-AMS 148)  
M 489 BORCULO (ex-AMS 107) M 856 BRUINISSE (ex-AMS 168)  
M 850 BORNE (ex-AMS 108) M 857 BOXTEL (ex-AMS 149)  
M 851 BRUMMEN (ex-AMS 111) M 858 BROUWERSHAVEN (ex-AMS 150)



BEEMSTER Class. 1954, R.N.N. Official.  
M 811 AALSMEER M 802 HOGEZAND M 806 ROERMOND  
M 810 ABCOUDE M 827 HOOGVEEN M 830 SITTARD  
M 808 AXEL M 822 LEERSUM M 828 STAPHORST  
M 801 DOKKUM M 843 LISSE M 824 SNEEK  
M 812 DRACHTEN M 816 LOCHEM M 804 STEENWIJK  
M 818 DRUNEN M 814 MEPPEL M 842 VEERE  
M 829 ELST M 809 NAALDWIJK M 817 VENLO  
M 841 GEMMERT M 823 NAARDEN M 807 WAALWIJK  
M 805 GIETEN M 813 OMMEN M 803 WILDERVANK  
M 815 GIETHOORN M 844 RHENEN M 820 WOERDEN  
M 819 GOES  
M 826 GRIJPSKERK

Displacement : 385 tons to 425 tons  
Dimensions : 149½ (o.a.) × 28 × 6½ feet  
Guns : 2—40 mm.  
Machinery : 2 diesel engines, Fyneoord MAN Werkspoor type (Netherlands) = 14 kts.  
Complement : 40 to 44

Notes.—Of 46 new coastal minesweepers 32 will be built in the Netherlands. 18 of these are being built under offshore procurement to the order of the U.S. (on American account under the terms of the Mutual Defense Assistance Program) which will conform to the British design of coastal minesweepers. The Netherlands is building 14 minesweepers on her own account. Remaining 14 were built in U.S. and transferred from the U.S.N. to the R.N.N. in 1953. All commissioned since 14 July 1953 (Beemster).

Motor Minesweepers



BORNDIEP. 1951, Official.

- BORNDIEP (ex-BYMS 2210) TEXELSTROOM (ex-BYMS 2156)  
DEURLOO (ex-BYMS 2254) VLIESTROOM (ex-BYMS 2155)  
HOLLANDS DIEP (ex-BYMS 2050) VOLKERAK (ex-BYMS 2188)  
MARSDIEP (ex-BYMS 2038) WESTERSCHDELDE (ex-BYMS 2046)  
OOSTERSCHDELDE (ex-BYMS 2230) ZUIDERDIEP (ex-BYMS 2048)

Displacement : 250 tons  
Dimensions : 136 × 24½ × 6 feet  
Guns : 1—3 inch, 2—20 mm. AA.  
Machinery : Diesel. B.H.P. : 1,000 = 13 kts.  
Oil fuel : 16 tons  
Complement : 27-29

Notes.—Wood construction. All launched 1942-43 Pendant Nos: M 831-840, respectively.



VLIELAND. 1947, Official.

- AMELAND (ex-MMS 231) ROZENBURG (ex-MMS 292)  
BEVELAND (ex-MMS 237) TERSCHELLING (ex-MMS 234)  
MARKEN II (ex-MMS 54) TEXEL (ex-MMS 73)  
PUTTEN (ex-MMS 138)

Displacement : 219 tons (285 tons full load)  
Dimensions : 105 (pp.), 119 (o.a.) × 23 × 9½ feet  
Guns : 2 M.G.  
Machinery : Diesel. B.H.P. : 375-480 = 9-10 kts.  
Complement : 18

Notes.—Wood. All launched 1942. Pendant Nos: M 861-867, respectively. Vlieland, M 868, sank at Hollandia, New Guinea, Nov. 1951. Of the larger motor minesweepers, Overflakker, (ex-MMS 1046), Tholen, (ex-MMS 1014), and Voorne, (ex-MMS 1044) were scrapped, April-June 1952. Duiveland and IJselmonde were lent to Indonesian Navy, 23 Feb., 1952.

## Motor Minesweepers.



1951, Official.

**GOEREE** (ex-R 240)  
**MALZWIN** (ex-R 268)  
**ROOMPOT** (ex-R 424)  
**SCHIERMONNIKOOG** (ex-R 246)  
**SCHOUWEN** (ex-R 244)

**SCHULPENGAT** (ex-R 255)  
**STORTEMELK** (ex-R 252)  
**URK** (ex-R 251)  
**VLIETER** (ex-R 290)  
**WALCHEREN** (ex-R 220)

Displacement : 125 tons (160 tons full load)  
Dimensions : 129 × 22 × 5 feet  
Guns : 1—40 mm., 1—20 mm. AA.  
Machinery : 2 single acting, 4-stroke Diesels. B.H.P. : 2,800 = 24 kts. (max.)  
Oil fuel : 16.7 tons  
Complement : 30-31.

Notes.—Wood. Built 1942-44 by Yacht-und Bootswerft Burmeister, Bremenburg and Swinemunde. Ex-German motor minesweepers of "R" type. Pendant Nos. : M 869-878, respectively. Transferred to R.N.N. in Nov., 1947. Schulpengat is used as a wreck locating vessel.

**KEETEN** (ex-Jakhs) **MASTGAT** (ex-Panter) **ZIJPE** (ex-Hermelijn)

Notes.—Former motor launches converted into shallow draught minesweepers. Pendant Nos. : M 881 (ex-RP 104), M 882 (ex-RP 105), and M 883 (ex-RP 106) respectively.

## Gate Vessels (ex-Minesweepers)



JAN VAN GELDER.

**ABRAHAM CRIJNSSEN**  
**ABRAHAM VAN DER HULST**

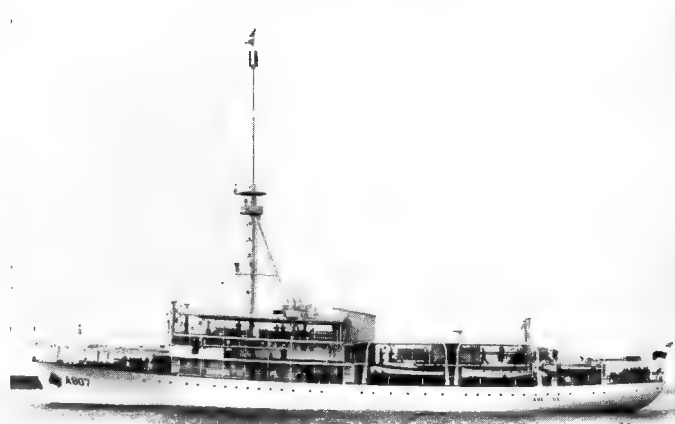
**JAN VAN GELDER**  
**PIETER FLORISZ**

Displacement : 500 tons (525 tons full load)  
Dimensions : 183 × 25½ × 7 feet  
Guns : 1—40 mm., 3—20 mm. AA.  
Machinery : Triple expansion. I.H.P. : 1,600 = 15 kts.  
Boilers : 2 Yarrow  
Oil fuel : 110 tons  
Complement : 62

Notes.—Former minesweepers. Now rated as local craft. Converted to gate vessels.

Pendant No.	Name	Builders	Launched
A 925	Abraham Crijnsen	Werf	22 Sep., 1936
A 928	Abraham van der Hulst	Gusto	27 May, 1937
A 927	Jan van Gelder		17 Apr., 1937
A 926	Pieter Florisz	Smit	11 May, 1937

## Surveying Vessels



1953, Official.

SNELLIUS.

### LUYMES

Displacement : 1,275 tons (1,334 tons full load)  
Dimensions : 234½ × 35½ × 7 (max.) feet  
Guns : 2—40 mm. AA., 4—20 mm. AA.  
Machinery : Two 6-cycle, 4-stroke Stork Diesels. 2 shafts.  
B.H.P. : 2,000 = 15 kts.  
Complement : 105

### SNELLIUS

Notes.—Fitted for service in the tropics. Snellius built by P. Smit, jr., Rotterdam, is serving in New Guinea. Luymes, by Werft Gusto, Schiedam, is in reserve.

No.	Name	Laid down	Launched	Completed
A 902	Luymes	4 Apr. 1949	21 Apr. 1951	4 May 1952
A 907	Snellius	3 Jan. 1949	14 Apr. 1951	4 Feb. 1952

### ZEEFAKKEL

Laid down : Sep. 1949  
Launched : 21 July 1950  
Completed : 22 Mar. 1951

Displacement : 368 tons  
Dimensions : 149 (o.a.) × 24½ × 7 (max.) feet  
Machinery : Two 8-cycle, 4-stroke Smit M.A.N. Diesels. 2 shafts.  
B.H.P. : 640 = 12 kts.  
Complement : 29

Notes.—Originally ordered from Vuyk, transferred later to J. & K. Smit Kinderdijk. Commissioned 16 Mar., 1951, for service in Dutch waters. Pendant No. A 903.

### DREG I

### DREG II

Displacement : 482 tons full load  
Dimensions : 65½ × 15 × 5 feet  
Machinery : H.P. : 120 = 10 kts.  
Complement : 10

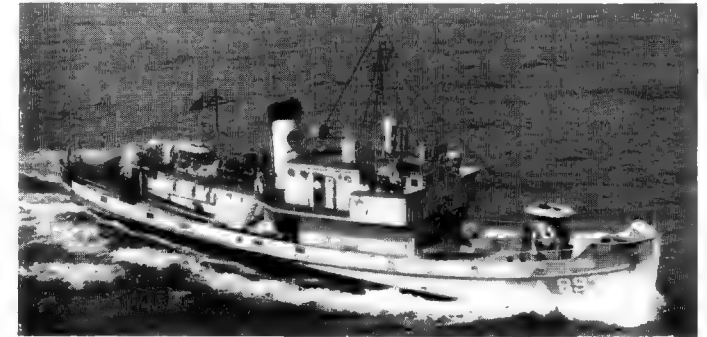
Notes.—Both launched 15 May 1950 and completed July 1950. Pendant Nos. A 909 and A 910. Dreg III and Dreg IV removed from Navy List 1954.

### HYDROGRAAF

Displacement : 297 tons  
Dimensions : 132½ × 22 × 9½ feet  
Machinery : Triple expansion. I.H.P. : 400 = 10 kts.  
Coal : 30 tons  
Complement : 23

Notes.—Built by Fijenoord, Rotterdam. Launched 1910. Pendant No. A 931.

## Anti-submarine Experimental Ship.



1953, Skyfotos.

**PAETS VAN TROOSTWIJCK** (ex-Süd III, ex-Istre, ex-Thor Jr.)

Displacement : 388 tons  
Dimensions : 118 (o.a.), 110½ (pp.) × 22 × 12 feet  
Machinery : 1 Triple expansion engine. I.H.P. : 550 = 10 kts.  
Oil fuel : 73 tons  
Complement : 23

Notes.—Ex-German whaler. Built 1924 at Akers Mekaniska Verksted. Sold 1937 to German owners. Allocated to Netherlands as reparations. Overhauled at the yard of the Nederlandse Dok en Scheepsbouw Mij. at Amsterdam in 1949, and commissioned as experimental Submarine Detection Ship, 1 July, 1949. Pendant No. : A 893.

## Depot Ships.



DOUWE AUKES.

Added 1951, Official.

### DOUWE AUKES

Builders : Werf Gusto, Schiedam  
Launched : 23 Feb., 1922

Displacement : 680 tons  
Dimensions : 180½ × 28½ × 10½ feet  
Machinery : 2 sets triple expansion. 2 shafts. I.H.P. : 1,260 = 13 kts.  
Coal : 115 tons  
Complement : 50

Notes.—Built under 1918 Programma. Minelayer, converted into an accommodation and repair ship for minesweepers, 1950. Pendant No. A 893.

### MEDUSA

Builders : Amsterdam Dockyard  
Launched : 1911

Displacement : 600 tons  
Dimensions : 163 × 29½ × 9 feet  
Machinery : I.H.P. : 800 = 11 kts.

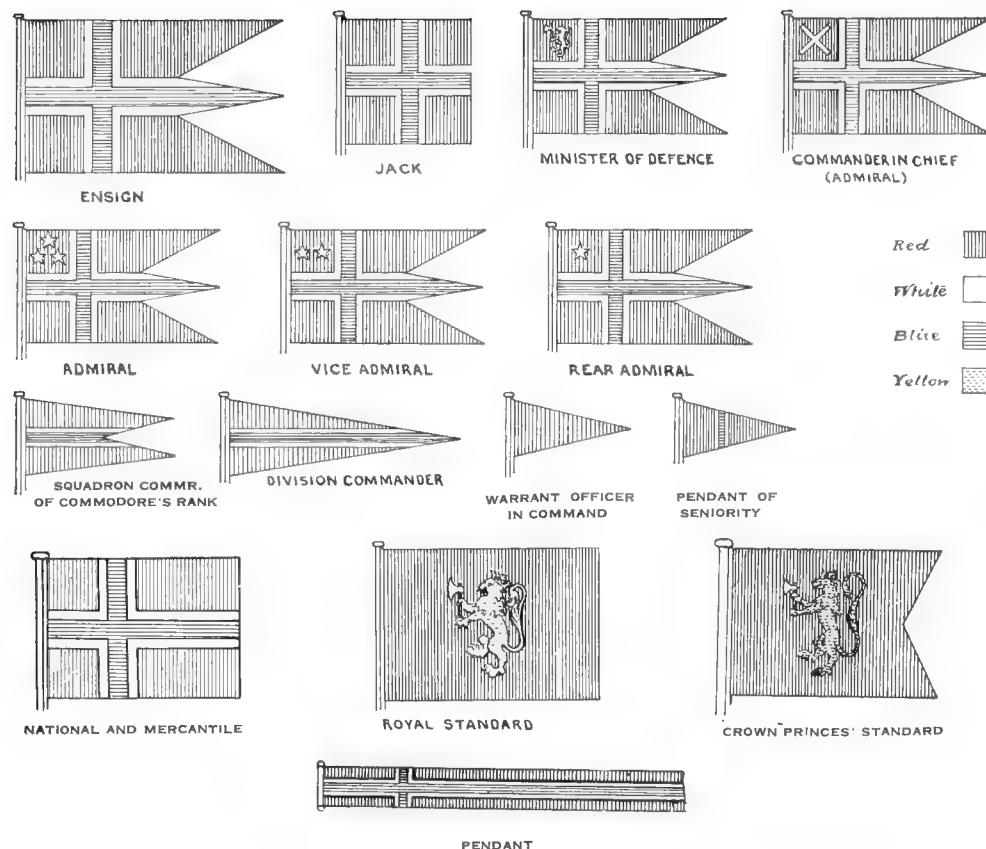
Note.—Former minelayer refitted as accommodation and repair ship for submarine branch. Pendant No. A 890.





# NORWAY

## Flags.



## Administration.

Minister of Defence : Mr. N. Langhelle.  
 Parliamentary Secretary : Mr. O. Brunvand.  
 Permanent Under-Secretary : Mr. J. Modalsli.  
 Commander-in-Chief : Vice-Admiral S. V. Storheill, D.S.C. & 2 Bars, R.Nor. N.  
 Chief of Naval Staff : Rear-Admiral R. K. Andresen, O.B.E., R.Nor.N.

Naval Attaché, London : Captain L. H. R. Lund, D.S.C., R.Nor.N.

## Uniforms.



Non-Executive branches have same insignia, but with colours between stripes as follows :

Engineers :	purple.
Surgeons :	red.
Supply Officers :	white.
Technical and Special branches :	green.

Midshipmen, klasse 2, has 2 stars on sleeves ; Cadet, klasse 1, has one star on sleeves.

Peaks of Caps of Commanders and higher ranks, formerly plain, are now decorated with gold laceas in British Navy.

## Five Year Programme.

The 1951-1955 programme provides for additions to the Navy including a battle damage repair ship, two minelayers, three submarines, and 13 motor torpedo boats to replace the former British Fairmile "D" type. The torpedo boats of the "Sleipner" class are being modernised as escort vessels and Norway has taken over two British escort destroyers (frigates) of the "Hunt" class. The building programme includes five minelayers with American engines and equipment.

## Ships

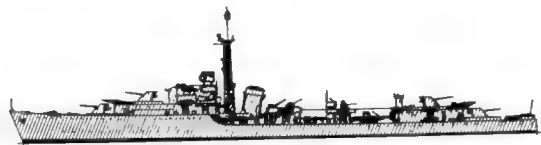
Norwegian warships are referred to officially with the prefix K.N.M., equivalent to H.M.S.

## Personnel.

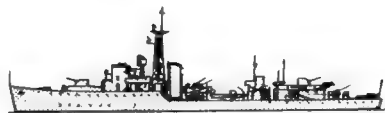
4,000 officers and ratings.

## Mercantile Marine.

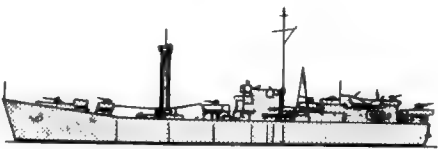
Lloyd's Register appendix, 1954 : 2,220 ships of 6,263,547 tons gross.



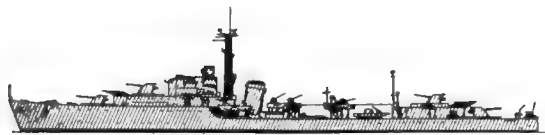
OSLO.



NARVIK.\*



ELLIDA.\*



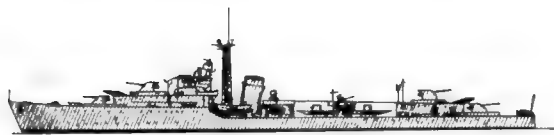
BERGEN Class.



ARENDAL.\*



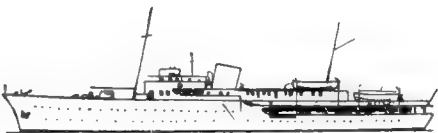
OTRA.\*



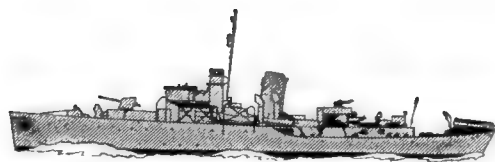
STORD.



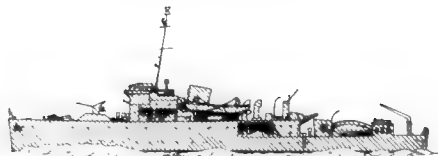
GYLLER.\*



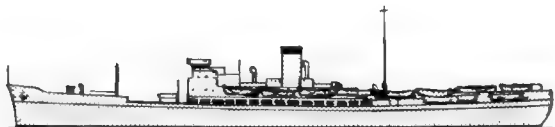
NORGE.



ANDENES Class.



GLOMMA, TANA.



SVALBARD.\*

# Destroyers.

4 "Oslo" Class.



1953, Skyfotos.



TRONDHEIM.

1953, R.Nor.N. Official.

**BERGEN** (ex-Cromwell, ex-Cretan) **OSLO** (ex-Crown) **STAVANGER** (ex-Crystal) **TRONDHEIM** (ex-Croziers)

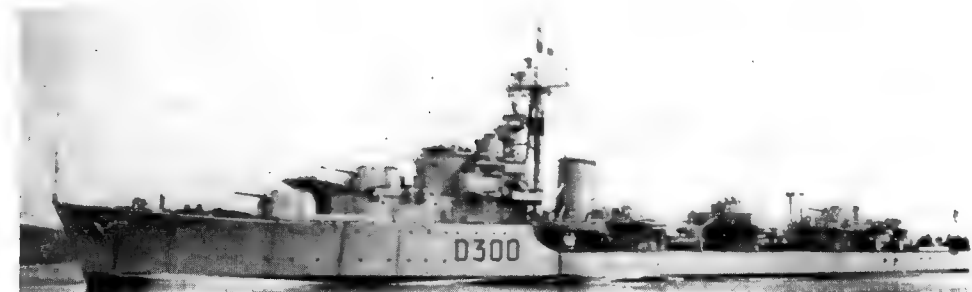
Displacement : 1,710 tons (Respective deep load figures are 2,503, 2,527 and 2,545 tons last two)  
 Dimensions : 362½ × 35½ × 16 feet (Trondheim 366½ × 35½ × 16 feet)  
 Guns : 4—4.5 inch d.p., 6—40 mm. AA.  
 Tubes : 4—21 inch (quadrupled)  
 Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 40,000 = 34 kts. (trial speeds 31.5 kts. first two, 32.8 others). Sea speed 32 kts. (Trondheim 33 kts.)  
 Boilers : 2, of 3-drum type  
 Complement : 240 (Trondheim 241)

Notes.—Purchased from Great Britain in 1946. Construction of these destroyers is entirely welded. Oslo is fitted as Leader.

Pendant Nos.	Name	Builders	Laid down	Launched	Completed
D 304	Bergen	Scotts' S.B. & Eng. Co. Ltd., Greenock.	24 Nov., 1943	6 Aug., 1945	1946
D 303	Oslo	Scotts' S.B. & Eng. Co. Ltd., Greenock.	16 Jan., 1944	19 Dec., 1945	17 Apr., 1947
D 306	Stavanger	Yarrow & Co. Ltd., Scotstoun, Glasgow.	13 Jan., 1944	12 Feb., 1945	6 Feb., 1946
D 305	Trondheim	Yarrow & Co. Ltd., Scotstoun, Glasgow.	26 Oct., 1943	19 Sep., 1944	30 Nov., 1945

# Destroyers—continued.

I "Stord" Type.



1954, R.Nor.N. Official.

**STORD** (ex-Success)

Builders : J. Samuel White & Co. Ltd., Cowes  
 Laid down : 25 Feb., 1942  
 Launched : 3 Apr., 1943  
 Completed : 6 Sep., 1943  
 Displacement : 1,750 tons (2,500 tons full load)  
 Dimensions : 366½ (o.a.) × 35½ × 17 feet  
 Guns : 4—4.7 inch, 6—40mm., 4—20 mm. AA.  
 Tubes : 8—21 inch (quadrupled)  
 Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 40,000 = 34 kts. (sea speed 30 kts.)  
 Boilers : 2, of 3-drum type  
 Complement : 209

Note.—Purchased from Great Britain in 1946. Pendant No. D 300.

I "Hunt" Type III (Escort Destroyer).



1954, C. Parsons, Esq.

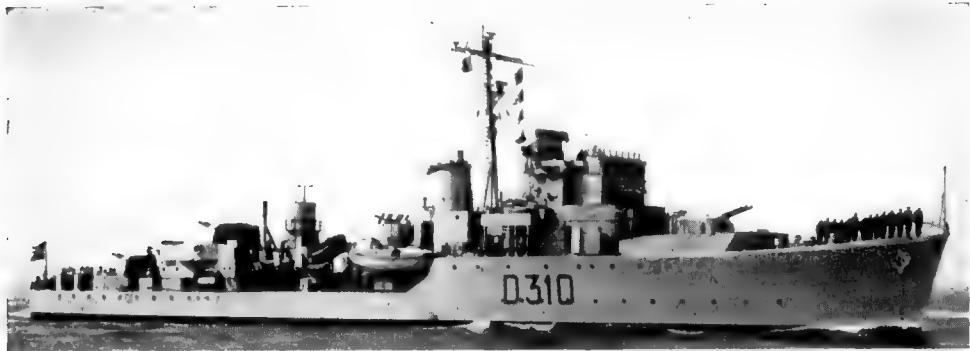
**NARVIK** (ex-Glaisdale)

Builders : Cammell Laird & Co., Ltd., Birkenhead  
 Laid down : 4 Feb., 1941  
 Launched : 5 Jan., 1942  
 Completed : 12 Jun., 1942  
 Displacement : 1,050 tons 1,435 tons full load  
 Dimensions : 264½ (pp), 280 (o.a.) × 31½ × 13 (max.) feet  
 Guns : 4—4 inch AA., 3—40 mm. AA., 4—20 mm. AA.  
 Tubes : 2—21 inch (twin)  
 Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 19,000 = 29 kts. trial speed 26 kts.  
 Boilers : 2, of 3 drum type  
 Oil fuel : 295 tons  
 Compliment : 201

Notes.—Purchased from Great Britain in 1946. Of former British "Hunt" class, Type III escort destroyers, later re-rated as frigates. Now has short lattice formast in place of her former tripod mast. Pendant No. D 309.

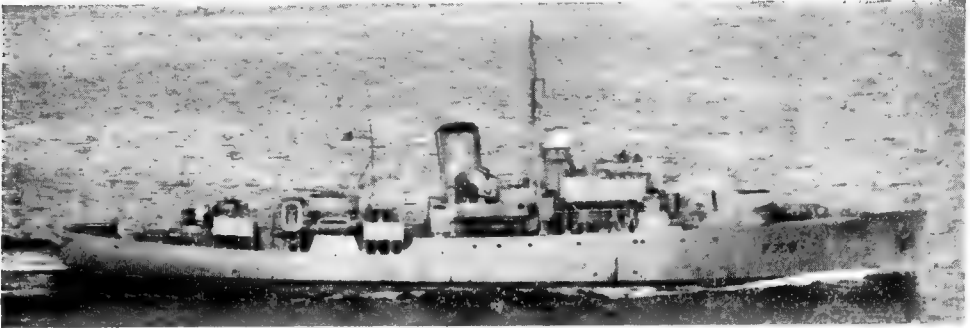
NORWAY—Frigates

3 "Hunt" Type II (Escort Destroyers).



ARENDALE.		1953, Wright & Logan.			
ARENDALE (ex-Badsworth)		HAUGESUND (ex-Beaufort)	TROMSØ (ex-Zetland)		
Displacement :		1,050 tons (1,490 tons full load) Arendal 1,430			
Dimensions :		280 (o.a.) $\times$ 31½ $\times$ 13 (max.) feet			
Guns :		6—4 inch AA., 2—40 mm. AA., 4—20 mm. Oerlikon AA.			
Machinery :		Parsons geared turbines. 2 shafts. S.H.P. : 19,000 = 27 kts.			
Boilers :		2, of 3-drum type			
Oil fuel :		272 tons			
Complement :		209			
Notes.—Arendal (Norwegian commissioned 16 Nov. 1944) was purchased from Great Britain in 1946. Other two transferred by Great Britain end of 1952 on loan to the Royal Norwegian Navy for 4 years. Of former British "Hunt" class, Type II escort destroyers, later re-rated as frigates. Arendal was recently used as Cadets' Training Ship.					
Pendant No.	Name	Builders	Laid down	Launched	Completed
D 310	Arendal	Cammell Laird & Co., Ltd., Birkenhead	15 May 1940	17 Mar. 1941	18 Aug. 1941
	Haugesund	Cammell Laird & Co., Ltd., Birkenhead	17 July 1940	9 June 1941	3 Nov. 1941
	Tromsø	Yarrow & Co., Ltd., Scotstoun, Glasgow	2 Oct. 1940	7 Mar. 1942	27 June 1942

3 "Andenes" Class. (Corvette Type).



SÖRÖY.		1951, R.Nor.N., Official.	
ANDENES (ex-Acanthus)		SÖRÖY (ex-Eglantine)	
Displacement :		Andenes 1,048 tons (1,229 tons full load), Nordkyn 1,002 tons (1,291 tons full load), Sörøy 1,020 tons (1,250 tons full load)	
Dimensions :		190 (pp.), 205 (o.a.) × 33 × 15½ (max.) feet	
Guns :		1—4 inch AA., 1—40 mm. AA., 4—20 mm. AA.	
Machinery :		4 cyl. triple expansion. I.H.P. : 2,750 = 16 kts.	
Boilers :		2 S.E.	
Oil fuel :		233 tons	
Complement :		94	

Notes.—Former British "Flower" class corvettes, later re-rated as frigates. All purchased from Great Britain.

Pendant Nos.	Name	Builders	Laid down	Launched	Completed	} Norw. Commis.
F 307	Andenes	Ailsa S.B. Co Ltd., Troon	21 Dec., 1939	26 May, 1941	1 Oct., 1941	
F 309	Nordkyn	Harland & Wolff, Belfast	17 Dec., 1940	10 Apr., 1941	24 Apr., 1942	
F 308	Sörøy	Harland & Wolff, Belfast	16 Jan., 1941	11 Jun., 1941	29 Aug., 1941	

Frigates (Escort Patrol Vessels).

5 "Sleipner" Class.



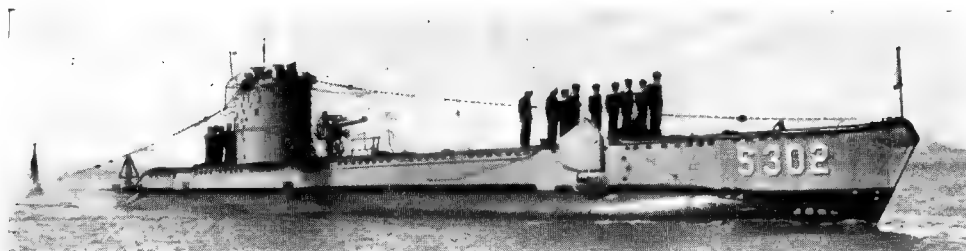
GYLLER. 1954, R.Nor.N. Official.



GYLLER 1953, C. Parsons, Esq.

BALDER	GYLLER	ODIN	SLEIPNER	TOR
Displacement :		632 tons standard (771 tons full load)		
Dimensions :		236½ (w.l.) 243½ (o.a.) × 25½ × 10½ (max) feet		
Guns :		3—3 inch AA., 2—40 mm. AA., 2 M.G., 4 D.C.T.		
Machinery :		2 De Laval geared turbines. 2 shafts. S.H.P. = 27,000 = 30 kts. (sea speed 26 kts.)		
Boilers :		2 water-tube, working pressure 450 lbs.		
Oil fuel :		115 tons		
Complement-		109		
Notes.—While in German hands Gyller, Odin, Balder and Tor were known as Löwe, Leopard, Panther and Tiger. Formerly classified as torpedo boats. Re-rated as escort vessels 1951. Balder and Gyller converted to escort vessels 1952. Odin, Sleipner and Tor 1953-54.				
Pendant No.	Name	Builders	Laid down	Launched
F 304	Balder	Horten Naval Yard	1939	11 Oct. 1939
F 301	Gyller	Horten Naval Yard	1936	2 Jul. 1938
F 302	Odin	Horten Naval Yard	1938	17 Jan. 1939
F 300	Sleipner	Horten Naval Yard	1933	7 May 1936
F 303	Tor	Frederikstad M.V.	Nov. 1938	1939

# Submarines (Undervannsbåter).



UTSTEIN.

1952, Wright &amp; Logan.

**UTHAUG** (ex-Votary)      **UTSIRA** (ex-Variance)      **UTSTEIN** (ex-Venturer)      **UTVÆR** (ex-Viking)

Displacement : 545 tons standard, 660 tons surface ; 740 tons submerged  
Dimensions : 204½ × 16 × 12½ feet  
Tubes : 4—21 inch (bow)  
Machinery : 2 Davey Paxman Diesels. 2 electric motors. H.P. : 1,050 = 12 kts.  
Oil fuel : 55 tons  
Complement : 38

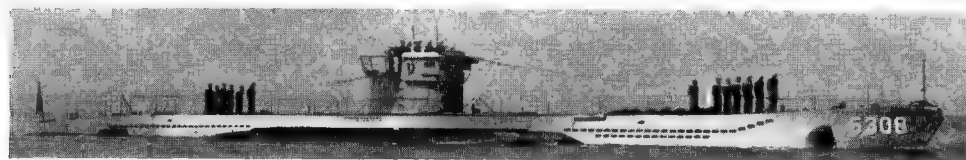
Notes.—All purchased from Great Britain. Named after features of the Norwegian seaboard.

**ULA** (ex-H.M.S. Varne)

Displacement : 653 tons (surface), 731 tons (submerged)  
Dimensions : 197 × 16 × 15 feet  
Tubes : 4—21 inch  
Machinery : 2 Davey Paxman Diesels, 2 electric motors. H.P. : 1,050 = 12 kts.  
Oil fuel : 55 tons  
Complement : 34

Notes.—Purchased from Great Britain. Ulla is name of the birthplace of Ulbrand, the navigator.

Pendant Nos.	Name	Builders	Laid down	Launched	Completed
S 301	Ula	Vickers-Armstrongs (Barrow)	29 Apr. 1942	22 June 1943	3 Apr. 1943
S 304	Uthaug	Vickers-Armstrongs (Tyne)	21 Apr. 1943	21 Aug. 1944	13 Dec. 1944
S 300	Utsira	Vickers-Armstrongs (Barrow)	21 May, 1943	22 May, 1944	24 Aug. 1944
S 302	Utstein	Vickers-Armstrongs (Barrow)	25 Aug., 1942	4 May, 1943	19 Aug., 1943
S 303	Uvaer	Vickers-Armstrongs (Barrow)	3 Sep., 1942	5 May, 1943	30 Aug., 1943



KYN.

1952, Wright &amp; Logan.

**KAURA** (ex-U 995)

**KYA** (ex-U 926)

**KYN** (ex-U 1202)

Displacement : 769 tons (surface), 871 tons (submerged)  
Dimensions : 220 × 20 × 15 feet  
Tubes : 5—21 inch  
Machinery : Krupp Diesels. Electric motors. H.P. : 3,900 = 17 kts.  
Oil fuel : 100 tons  
Complement : 43

Notes.—Ex-German VII C Type. All equipped with snort. Kaura was allocated to Great Britain and handed to Norway. Acquired Oct. 1948. Have all undergone major refit. Knerter (ex-German 4706) coastal type has been discarded.

Pendant No.	Name	Builders	Launched	Completed
S 309	Kaura	Blohm & Voss, Hamburg	1941	1942
S 307	Kya	Neptun, Rostok	1942	1943
S 308	Kynn	Schichan, Danzig	1942	1943

# Fleet Minesweepers.

2 New Construction.

Note.—Two oceangoing minesweepers are being acquired under Mutual Defence Assistance Programme.

2 "Glomma" Class.



TANA

1953, R. Nor. N., Official.

**GLOMMA** (ex-H.M.S. Bangor)

**TANA** (ex-H.M.S. Blackpool)

Displacement : 590 tons (690 tons full load)  
Dimensions : 162 × 28 × 8½ feet  
Guns : 1—3 inch AA., 1—40 mm. AA., 2—20 mm. AA.  
Machinery : 2 sets. Diesels. 2 shafts. B.H.P. : 2,000 = 16 kts.  
Complement : 60

Notes.—"Bangor" Class fleet minesweepers, diesel type. Both purchased from Great Britain in 1946.

Name	Builders	Laid down	Launched	Completed
Glomma	Harland & Wolff (Govan)	19 Sep. 1939	23 May 1940	4 Nov. 1940
Tana	Harland & Wolff (Govan)	19 Sep. 1939	4 Jul. 1940	7 Feb. 1941

# Weather Ships (ex-Frigates).

**POLARFRONT I** (ex-Saxifrage)

**POLARFRONT II** (ex-Bryony)

Displacement : 1,060 tons standard (1,300 tons full load)  
Dimensions : 205 (o.a.) × 33 × 14½ (max.) feet  
Machinery : Triple expansion. I.H.P. : 2,750 = 16.5 kts.  
Boilers : 2 S.E.  
Complement : 46

Note.—Ex-British "Flower" class corvettes employed as weather ships.

Name	Builders	Laid down	Launched	Completed
Polarfront I	Charles Hill & Sons, Ltd., Bristol	1 Feb. 1941	24 Oct. 1941	6 Feb. 1942
Polarfront II	Harland & Wolff, Ltd., Belfast	16 Nov. 1940	15 Mar. 1941	16 June 1942



NORWAY—M.T.B.s, Coastal Minesweepers, Coastal Minelayers

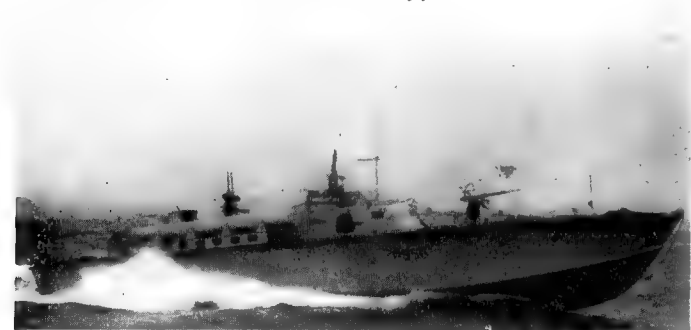
Motor Torpedo Boats.  
6 New Construction.

KAPP

Displacement : 75 tons approx.  
Dimensions : 87 × 23 × 5 feet  
Guns : 1—40 mm. and other light AA.  
Tubes : 4—21 inch  
Machinery : 4 Packard petrol engines  
Speed : 32 kts. (sea), 41 kts. (max.)  
Complement : 18

Notes.—1 prototype M.T.B. built by A. S. Westermoenes Barbyggeri, Mandal. Laid down Aug. 1951, Launched 7 May 1952, Completed 18 Nov. 1952. Wood. 5 others of same type built 1953-54.

10 Ex-U.S. Type.



1953, R. Nor. N., Official

HAI  
HAUK  
HVAL

HVASS  
SEL  
SILD

SKREI  
SNAR  
SNÖGG  
SPRINGER

Displacement : 50 tons (53 tons full load)  
Dimensions : 80 × 24 × 5½ feet  
Guns : 1—40 mm., 1—20 mm.  
Tubes : 2—21 inch  
Machinery : 3 Packard petrol engines. 3 shafts. B.H.P. : 4,500 = 43 kts.  
Complement : 15

Notes.—Built in U.S.A. 1945. All received from U.S.A. in 1951 under MDAP Programme. All Elco boats. Ex-PT 602-606, 608-612.



1949, Official.

FALK (ex-MTB 704)  
JO (ex-MTB 713)  
KJELD (ex-MTB 716)

LOM (ex-MTB 719)  
RAVN (ex-MTB 720)

SKARV (ex-MTB 721)  
STEGG (ex-MTB 722)  
TEIST (ex-MTB 723)

Displacement : 91 tons (120 tons full load)  
Dimensions : 115 × 21½ × 5 feet  
Guns : 1—40 mm. AA., 4—20 mm. AA.  
Tubes : 4—21 inch  
Machinery : 4 Packard engines. B.H.P. : 5,000 = 30 kts.  
Complement : 24

Notes.—Fairmile D type. All launched 1944. Completed and commissioned (Norw.) 1944-45. Purchased from Great Britain in 1946.

Coastal Minesweepers.  
7 New Construction.



SAUDA.

1954, R.Nor.N. Official.

SAUDA (ex-U.S.S. AMS 102)

Displacement : 333 tons (384 tons full load)  
Dimensions : 144 × 28 × 8½ (max.) feet  
Guns : 2—20 mm. AA.  
Machinery : G.M. Diesels. B.H.P. : 880 = 13.5 kts.  
Oil fuel : 25 tons  
Complement : 39

Notes.—Sauda built July 1953, East Boothbay, Maine. Hull of wood. Five wooden coastal minesweepers of the non-magnetic AMS type are being built in Norway (U.S. hull numbers 1601, 1602, 1603, 1604, 1605), engines in U.S. To complete 1954. 2 NATO class AMS 60 class motor minesweepers (U.S. hull numbers AMS 131, 132, building in U.S. under MDAP To complete 1954.



ALTA.

1949, Official.

ALTA (ex-NYMS 379)  
BEGNA (ex-NYMS 381)

DRIVA (ex-NYMS 377)  
GAULA (ex-NYMS 305)

RANA (ex-NYMS 406)  
VINSTRA (ex-NYMS 247)  
VORMA (ex-NYMS 480)

Displacement : 260 tons (full load)  
Dimensions : 136 × 24½ × 8½ feet  
Guns : 1—3 inch, 2—20 mm. AA.  
Machinery : 2 G.M. Diesels. 2 shafts. B.H.P. : 1,000 = 14 kts.  
Oil fuel : 18 tons  
Complement : 31

Notes.—Wood. U.S. YMS type. All transferred to the Royal Norwegian Navy under Lend-Lease scheme in 1947.

Motor Minesweepers.



1949, Official.

ORKLA (ex-MMS 1085)

VEFSNA (ex-MMS 1086)

Displacement : 360 tons (408 tons full load)  
Dimensions : 126 (p.p.), 140 (o.a.) × 26 × 12½ (max.) feet  
Guns : 2—20 mm. AA.  
Machinery : Diesel. B.H.P. : 500 = 10 kts.  
Oil fuel : 55 tons  
Complement : 21

Notes.—Wood. Motor minesweepers, purchased from Great Britain in June 1946. Now equipped as X-ray ships. Pendant Nos. M 313 and M 314 respectively.

Coastal Minelayers.  
2 LSM Type

VALE (ex-U.S.S. LSM 492)

VIDAR (ex-U.S.S. LSM 493)

Displacement : 743 tons light, (1,100 tons full load)  
Dimensions : 196½ (w.l.), 203½ (o.a.) × 34½ × 8½ feet  
Guns : 8—40 mm. AA., 6—20 mm. AA.  
Machinery : 2 G.M. Diesels. 2 shafts. B.H.P. : 2,800 = 13 kts.  
Oil fuel : 130 tons  
Complement : 73

Note.—Both vessels launched April 1945. Converted by U.S. Navy 1952 and taken over by Royal Norwegian Navy October 1952 under the Mutual Defense Assistance Programme

2 "Otra" Class.



1949, Official.

OTRA.

RAUMA

Displacement : 311 tons (350 tons full load)  
Dimensions : 168½ × 23½ × 11½ feet  
Guns : 1—3 inch, 2—20 mm.  
Machinery : 2 Triple expansion. I.H.P. : 900 = 14 kts.  
Oil fuel : 33 tons  
Complement : 36

Notes.—Laid down at Nyland Mek. Verksted, Oslo, Jan. 1939. Otra completed Sep. 1939. Rauma completed Jan. 1940.

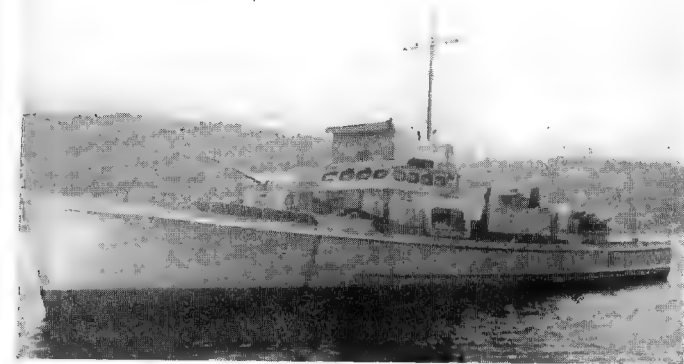
## Auxiliary Minelayers

### VARGSUND

Displacement : 600 tons  
Dimensions : 185½ (o.a.) × 38½ × 4½ feet  
Guns : 2—20 mm. AA.  
Machinery : 2 Paxman Ricardo Diesels. 2 shafts. B.H.P. : 500  
Oil fuel : 43 tons  
Complement : 19

Notes.—Built 1945 in Great Britain. LCT Type. Converted to auxiliary coastal minelayers.

## Motor Launches.



HITRA.

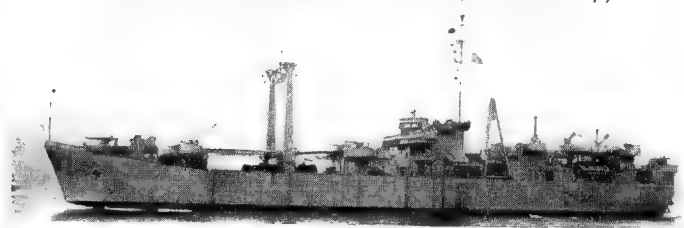
1947, courtesy Commodore H. Henriksen, R.Nor.N.

### HESSA (ex-SC 683)

Displacement : 85 tons (130 tons full load)  
Dimensions : 107½ (w.l.), 111½ (o.a.) × 17 × 6½ feet  
Guns : 1—40 mm., 4—20 mm. AA.  
Machinery : 2 G.M. Diesels. 2 shafts. B.H.P. : 2,400 = 19 kts.  
Oil fuel : 15 tons  
Complement : 24

Notes.—Ex-U.S. SC type. Wood. U.S.A. Lend Lease 1943.

## Battle Damage Repair Ship (Verktedsskip).



1954, R.Nor.N. Official.

### ELLIDA (ex-U.S.S. ARB 13, ex-U.S.S. LST 50)

Builders : Dravo Corp., Pittsburgh  
Laid down : 29 Aug. 1943  
Launched : 16 Oct. 1943  
Completed : 27 Nov. 1943  
Displacement : 2,300 tons standard, (3,500 tons full load)  
Dimensions : 316 (w.l.), 273½ (o.a.) × 50 × 12 (max.) feet  
Guns : 12—40 mm. AA., 12—20 mm. AA.  
Machinery : G.M. Diesels. 2 shafts. B.H.P. : 1,800 = 11 kts.  
Complement : 375

Notes.—Former United States tank landing ship first commissioned 1943. Converted to battle damage repair ship ARB 1 class in 1952 by Puget Sound Bridge & Dredger Co. Taken over by Royal Norwegian Navy at Seattle 14 Nov. 1952 under the Mutual Defense Assistance Program, and will serve as battle damage repair ship for Norwegian naval surface vessels and craft. Ellida has been a traditional name for Norwegian naval ships for more than a century.

## Depot Ships.

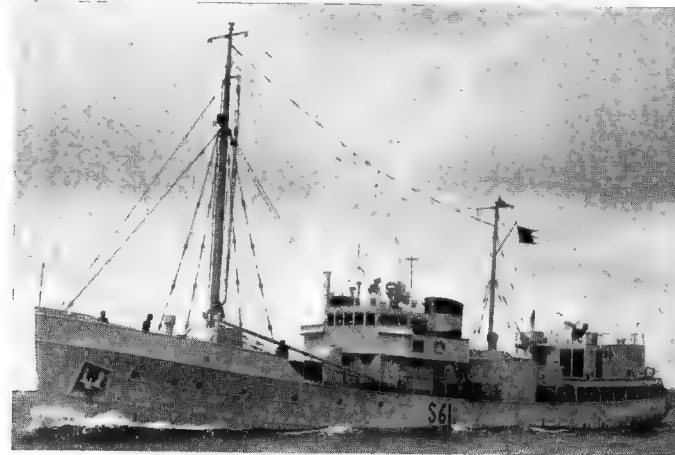


1954, R.Nor.N. Official.

### VALKYRIEN

Builders : Burmeister & Wain, Copenhagen  
Laid down : 1911  
Launched : 10 Jan. 1912  
Displacement : ca 1,500 tons (official estimate)  
Measurement : 1,069 tons gross  
Dimensions : 221½ (o.a.) × 31½ × 16½ feet  
Guns : 1—3 inch, 3—40 mm. and other light AA.  
Machinery : Triple expansion, 1 shaft. Oil burning.  
I.H.P. : 1,215 = 12 kts.  
Oil fuel : 93 tons  
Complement : 76

Notes.—Served as regular coastal passenger, mail, and freight carrier for owners. Converted to Depot Ship for Motor Torpedo Boats 1952-53 by Berger Mek. Verksted.



1950, Wright & Logan.

### SARPEN (ex-German Königsau)

Displacement : 700 tons (approx.) official estimate  
Measurement : 372.8 tons gross  
Dimensions : 156 × 25½ × 10 feet  
Guns : 3—20 mm. AA.  
Machinery : 2 Krupp Diesels. B.H.P. : 2,100 = 16 kts.  
Oil fuel : 39 tons  
Complement : 32

Note.—Handed over 19 April, 1947. Pendant No. is now A 530.

## Fishery Protection Vessels.

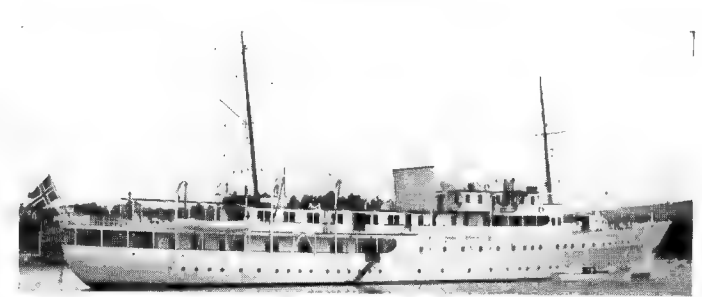
### NORDKAPP

Displacement : 243 tons standard (279 tons full load)  
Dimensions : 130½ × 21 × 7½ feet  
Guns : 1—40 mm., 1—20 mm.  
Machinery : 2 Sulzer Diesels. H.P. : 700 = 12.5 kts.  
Oil fuel : 30 tons  
Complement : 28

Notes.—Both built at Horten. Launched 18 Aug. 1937 and 25 Aug. 1937 respectively.

### SENJA

## Royal Yacht.



1954, C. Passons, Esq.

### NORGE (ex-Philante)

Builders : Camper & Nicholson, Ltd.  
Launched : 17 Feb., 1937

Measurement : 1,686 tons T.M.  
Dimensions : 250½ (pp.), 263 (o.a.) × 28 × 15½ feet  
Machinery : 8-cyl. Diesels. 2 shafts. B.H.P. : 3,000 = 17 kts.

Notes.—Built for Mr. T. O. M. Sopwith to act as escort and store vessel for Endeavour I and Endeavour II. Served in British Navy as an anti-submarine escort vessel during the Second World War, after which she was purchased for King Haakon by the Norwegian people at a cost of nearly £250,000 and re-conditioned as a Royal Yacht at Southampton. Good sea boat. Can accommodate about 50 people in addition to the crew.

## Transport.



1954, R.Nor.N. Official.

### SVALBARD (ex-German Togo),

Launched : 1938

Displacement : 5,040 tons  
Dimensions : 415 × 58½ × 24 feet  
Machinery : 2 S.C.D.A. Bremer Vulcan, H.P. : 6,150 = 15 kts.  
Oil fuel : 750 tons  
Complement : 50

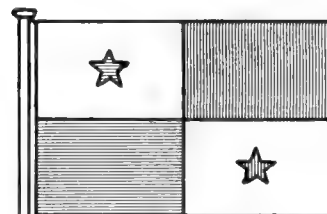
## Auxiliary (Asdic Training Ship).

### DRAUG (ex-German Pommon)

Displacement : 198 tons  
Dimensions : 115 × 21 × 7 feet  
Machinery : 1 Deutsche Werke. 1 H.P. : 200  
Complement : 16

## PANAMA

### Flag.



ENSIGN and MERCANTILE.

### Mercantile Marine.

Lloyd's Register appendix, 1954 :  
596 ships of 3,915,074 tons gross.

### Coast Guard Patrol Vessels.

2 U.S. Type.

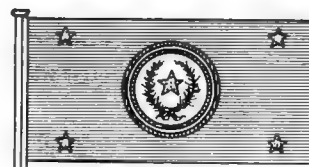
Displacement : 35 tons  
Dimensions : 69 × 14 × — feet  
Guns : 1 M.G.  
Machinery : H.P. : 400 — 13 kts.  
Complement : 10

Note.—Two small craft (to replace YP 162, 539, formerly on loan) purchased from the U.S. Government in 1947.

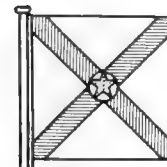
### Tug.

Note.—Existence of a Navy fire-fighting tug is reported.

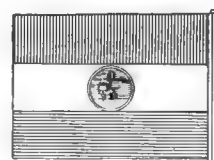
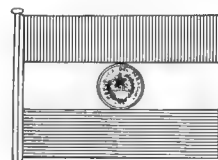
### Flags.



PRESIDENT.



JACK.



ENSIGN AND MERCANTILE.

### Uniforms.



Vice-Almirante. Contra-Almirante. Capitán de Navio. Capitán de Fragata. Capitán de Corbeta. Teniente de Navio. Teniente de Fragata. Teniente de Corbeta. Guardia Marina.

### Administration.

Minister of National Defence: General de División Don Francisco Caballero Alvarez.

In Command of Fleet: Capitán de Navio Don Gabriel A. Patino.

### Personnel.

1,900 officers and ratings.

### Patrol Launches (Launchas Patrulleras).

P 1	P 2	P 3	P 4	P 5	P 6
Displacement :	16 tons				
Dimensions :	45½ (o.a.) × 13½ × 3½ feet				
Guns :	2—20 mm. AA.				
Machinery :	2 petro lmotors. 2 shafts. H.P. : 190 = 20 kts.				
Complement :	10				

Notes.—Wood. Built U.S.A. 1944. Acquired from U.S. Coast Guard, 1944. Ex- U.S.C.G.C. 20417, 20418, 20419, 20431, 21422, 20423.

## PARAGUAY

### River Gunboats (Canoneros).

HUMAITA (ex-Capitán Cabral)	PARAGUAY (ex-Comodor Meya)
Displacement :	636 tons (865 tons full load)
Dimensions :	231 × 35 × 5½ feet
Guns :	4—4.7 inch, 4—3 inch AA., 2 M.G.
Mines :	6
H.T. Armour :	½" side amidships, ½" deck, ¾" C.T.
Machinery :	Parsons geared turbines. 2 shafts. S.H.P. 3,800 = 17 kts.
Boilers :	2
Oil fuel :	150 tons
Radius :	1,700 miles at 16 kts.
Complement :	86

Notes.—Fitted for minelaying.

No.	Name	Builders	Laid down	Launched	Completed
C 2	Humaita	Odero, Genoa	Apr. 1929	1930	May, 1931
C 1	Paraguay	Odero, Genoa	Apr. 1929	1930	May, 1931

### River Patrol Boats (Avisos de Guerra).



1954, Official.

### CAPITAN CABRAL

Built :	Werf-Conrad, Haarlem
Launched :	1907
Displacement :	206 tons
Dimensions :	98½ (pp.), 107½ (o.a.) × 23½ × 9½ feet
Guns :	1—3 inch Vickers, 2—37 mm. Vickers, 4 M.G.
Machinery :	Triple expansion. I.H.P. : 300 = 9 kts.
Complement :	47

Note.—Of wooden construction.

### CORONEL MARTINEZ

Displacement :	80 tons
Dimensions :	71½ × 18 × 8½ feet
Guns :	1—3 inch, 2—37 mm.
Machinery :	I.H.P. : 150 = 6.5 kts.

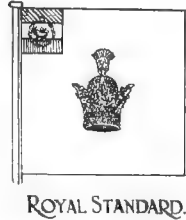
### TENIENTE HERREROS

Displacement :	41 tons
Dimensions :	63½ × 11 × 6½ feet
Guns :	4 M.G.
Machinery :	I.H.P. : 300 = 5.5 kts.

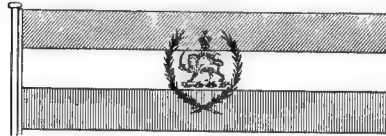
Notes.—Built in Netherlands 1908. Pendant No. A3.

# PERSIA (IRAN)

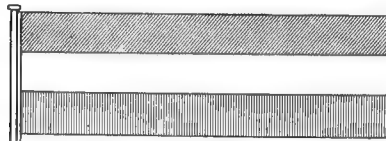
## IMPERIAL IRANIAN NAVY Flags.



ROYAL STANDARD.



ENSIGN.



MERCANTILE

## Administration.

Chief of Naval Operations : Rear-Admiral H. Shahin.

## Ships.

The three gunboats *Shahbaz*, *Shahrokh* and *Simorgh* were scrapped in 1953.

The two ex-air/sea rescue craft (ex-M.T.B.'s) were handed over to the Custom Guard in 1953.

## Personnel.

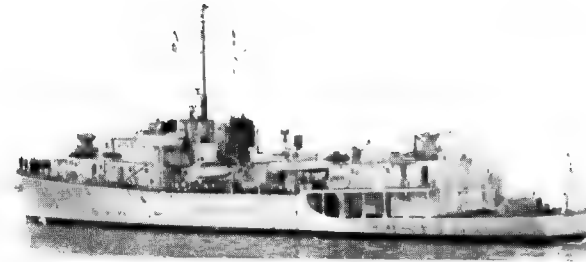
1,650 officers and men.

## Silhouette.



B.A.B.R.

## Frigates.



B.A.B.R.

1949, Abrahams.

**B.A.B.R.** (ex-H.M.S. *Derby Haven*, ex-*Loch Assynt*)

Builders : Swan, Hunter, & Wigham Richardson, Ltd.  
Laid down : 11 Feb., 1944  
Launched : 14 Dec., 1944  
Completed : 2 Aug., 1945

Displacement : 1,652 tons standard (2,160 tons full load)  
Dimensions : 307½ × 38½ × 12½ feet  
Guns : 2—4 inch, 4—40 mm. AA.  
Machinery : Triple expansion, 2 shafts. I.H.P. : 5,500 = 19.5 kts.  
Boilers : 2 Admiralty 3-drum type.

Notes.—Modified "Loch" class frigate. Acquired from Great Britain in 1949. "Babr" means "Panther."



PALANG.

1954, courtesy A. Gosling, Esq.

**PALANG** (ex-H.M.S. *Fly*)

Builders : Lobnitz & Co., Ltd., Renfrew  
Laid down : 6 Oct., 1941  
Launched : 1 June, 1942  
Completed : 20 Oct., 1942

Displacement : 1,040 tons standard (1,335 tons full load)  
Dimensions : 235 (o.a.) × 35½ × 11½ feet  
Guns : 2—4 inch, 4—40 mm. AA., 2 D.C.T.  
Machinery : Triple expansion, 2 shafts. I.H.P. : 2,000 = 16.5 kts.  
Boilers : 2, of 3-drum type  
Complement : 85

Notes.—Former "Algerine" class ocean minesweeper and escort vessel acquired from Great Britain in 1949. "Palang" means "Tiger."

## Motor Launches



Added 1951, Builders, courtesy M. J. Meister.

**BABOL SAR**

**GORGAN**

**SEFIDREUDE**

Displacement : 28 to 32 tons  
Dimensions : 68½ × 12½ × 5½ feet  
Guns : 1—47 mm. (Skoda), 1 M.G.  
Machinery : 2 Krupp Diesels, 2 shafts. B.H.P. : 300 = 14 kts.

Note.—Built by Cant. Nav. Riuniti, Palermo. In Caspian Sea.

## Imperial Yacht.

**CHAHSAVAR**

Builders : N.V. Boele's Scheepswerven, Bolnes, Netherlands.  
Launched : 1936  
Displacement : 530 tons  
Dimensions : 176½ × 25½ × 10½ feet  
Machinery : 2 sets Diesels by Gebr. Stork, of Hengelo.  
B.H.P. : 1,300 = 15 kts.

Note.—In Caspian Sea.

## Tug.

**YADAK BAR** (ex-*Neyrou*)

Builders : Cant. Nav. Riuniti, Ancona.  
Launched : 9 Dec., 1934  
Displacement : 226 tons  
Dimensions : 81 (pp.), 88½ (o.a.) × 22 × 10 feet  
Guns : 2 M.G.  
Machinery : Triple expansion. I.H.P. : 600 = 11 kts.

Note.—In Persian Gulf.

## Tender.

**SIRRY** (ex-MFV 1513)

Length : 90 feet.  
Note.—Purchased from Britain, 1949. Rated as "Fire Extinguishing Boat."

## Dispatch Boat.

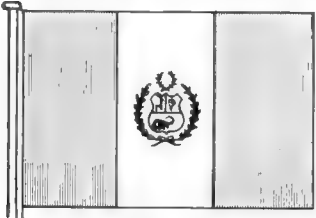
**TAHMADOU** (ex-FDB 58, ex-SDML 1389)

Displacement : 46 tons  
Dimensions : 72 × 16 × 5 feet  
Guns : 8 M.G.  
Machinery : Diesel. B.H.P. : 320 = 12 kts.  
Complement : 10

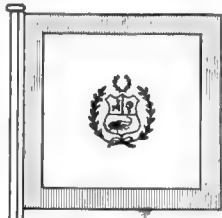
PERU

Flags.

The wreath on top of the central emblem of National Flag and Jack is closed without gap. The central emblem of Presidential Insignia is the same as used in the National Flag.



NATIONAL.



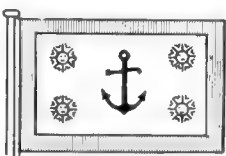
JACK.



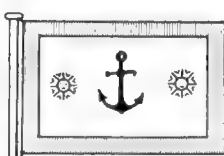
MERCANTILE



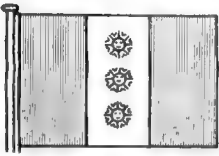
PRESIDENT.



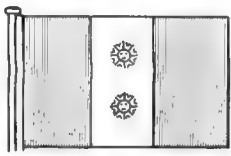
MINISTER OF MARINE.



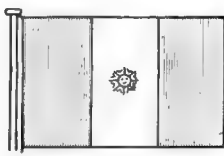
CHIEF OF STAFF



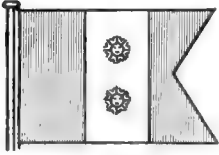
VICE-ADMIRAL  
in Command.



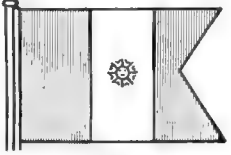
REAR-ADMIRAL  
in Command



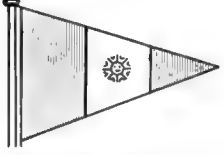
REAR-ADMIRAL  
Subordinate.



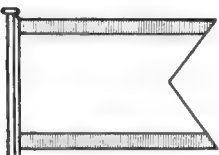
CAPTAIN.  
Independent Command.



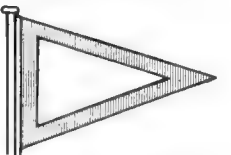
CAPTAIN.  
Subordinate.



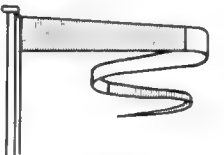
SENIOR NAVAL OFFICER



FLOTILLA COMMAND.



DIVISION COMMAND.



PENDANT.

Uniforms.



- |  |  |                                  |                                      |   |  |   |   |
|--|--|----------------------------------|--------------------------------------|---|--|---|---|
| Vice-<br>Almirante.<br>Vice-<br>Admiral. | Contra-<br>Almirante.<br>Rear-<br>Admiral. | Capitán<br>de Navio.<br>Captain. | Capitán<br>de Fragata.<br>Commander. | Capitán<br>de Corbeta.<br>Lieut-<br>Commander | Teniente<br>1º.<br>Lieutenant<br>(Senior). | Teniente<br>2º.<br>Lieutenant.<br>(Junior). | Alferez<br>de Fragata.<br>Sub-<br>Lieutenant. |
|--|--|----------------------------------|--------------------------------------|---|--|---|---|

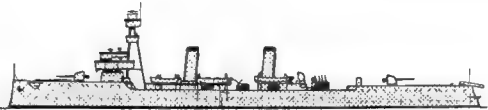
All branches wear the same stripes, but instead of radiant sun, Engineers and Surgeons wear respectively a propeller and a caduceus.

Administration.

Minister of Marine : Vice-Admiral Roque A. Saldías.  
Chief of the General Staff of the Navy : Rear-Admiral Manuel R. Nieto.

Silhouettes.

Scale : 150 ft. = 1 inch.



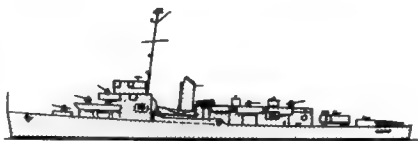
ALMIRANTE GRAU  
(CORONEL BOLOGNESI similar, but without  
poop and sternwalk.)



FERRÉ, PALACIOS.



GALVEZ.



AGUIRRE Class



VILLAR.

Mercantile Marine.

Lloyd's Register appendix, 1954 : 52 vessels of 102,973 tons gross.



## Light Cruisers.



ALMIRANTE GRAU.

1950, Peruvian Navy, Official.



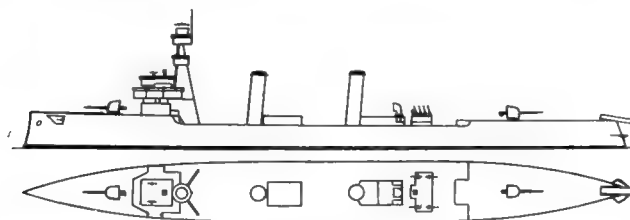
CORONEL BOLOGNESI.

1950, Peruvian Navy, Official.

### ALMIRANTE GRAU

Displacement : 3,200 tons  
 Dimensions : Length : 370 feet (pp.), 380 (o.a.), Beam : 40½ feet. Draught : 14½ feet (max.)  
 Guns : 2—6 inch, 50 cal., 6—3 inch (Vickers). 2—3 inch AA. (Japanese), 7—12.7 mm. (Browning)  
 A/S weapons : 1 Y gun, 2 Depth Charge Racks  
 Armour : 14" deck (amidships), 3" C.T., 3" gun shields  
 Machinery : 4 cylinder vertical triple expansion. 2 shafts. Designed H.P. : 14,000 = 23.5 kts.  
 Boilers : 8 Yarrow (new in 1934)  
 Oil fuel : 500 tons normal  
 Endurance : 3,700 miles at 10 kts.  
 Complement : 315

### CORONEL BOLOGNESI



**General Notes.**—Refitted at Balboa, boilers being re-tubed and modified for oil burning, 1923-25. Reboilered by Yarrow, 1934-35, after which both ships were good for 23.5 kts. at sea. Used for administrative and training purposes.

**Gunnery Notes.**—Italian Giradelli-type training indicators were added to gunnery equipment. The 20 mm. guns are mounted in pairs.

**Historical Notes.**—Rear-Admiral Grau commanded the Peruvian fleet in the war with Chile in 1879, and lost his life when his flagship, the *Huascar*, was captured in the Battle of Angamos. Don Francisco Bolognesi was killed in the defence of Arica in June, 1880.

Name	Builders & Engineers	Laid down	Launched	Completed
Almirante Grau	Messrs. Vickers, Ltd.	1905	27 Mar., 1906	1907
Coronel Bolognesi		1905	24 Sep., 1906	1907

## Destroyer Escorts

3 Ex-U.S. Type.



CASTILLA.

1953, Peruvian Navy Official.

**AGUIRRE** (ex-Waterman, DE 740)

**CASTILLA** (ex-Bangust, DE 739)

**RODRIGUEZ** (ex-Weaver, DE 741)

Displacement : 1,500 tons standard (1,900 tons full load)  
 Dimensions : 306 (o.a.), 300 (pp.) × 36½ × 12 (max.) feet  
 Guns : 3—3 inch, 50 cal., d.p., 6—40 mm. AA., (in three twin mountings) 10—20 mm. AA.  
 Torpedo tubes : Removed  
 A/S Weapons : 1 Mark X Ahead Throwing weapons (hedgehog) for 7.2 inch rocket missiles; 8 K guns  
 Machinery : 4 Diesel-electric sets coupled to 2 shafts. B.H.P. : 6,000 = 21 kts.  
 Oil fuel : 322 tons  
 Radius : 10,500 miles at 12 kts.  
 Complement : 220

**Notes.**—Formerly United States Destroyer Escorts of "Bostwick" class. Transferred to Peru Oct. 26, 1951, under the Mutual Defense Assistance Program. Original three torpedo tubes in triple mounting removed. Reconditioned and modernised at Green Cove Springs and Jacksonville, Flor. Actually arrived in Peru 24 May, 1952.

Pendant No.	Name	Builders	Launched	Completed
D 2	Aguirre	Western-Pipe & Steel Co., San Pedro, California	4 July 1943	31 Dec. 1943*
D 3	Castilla		6 June 1943	30 Oct. 1943*
D 3	Rodriguez		20 June 1943	30 Nov. 1943*

\* Commissioning dates.

PERU—Frigates and Minelayer

Frigates.



PALACIOS. 1953, Peruvian Navy Official.



FERRÉ. 1951, Peruvian Navy, Official

FERRÉ (ex-H.M.C.S. Poundmaker)

PALACIOS (ex-H.M.C.S. St. Pierre)

Displacement:	1,445 tons standard (2,360 tons full load)
Dimensions :	301½ × 36½ × 12 feet
Guns :	3—3 inch d.p., 4—40 mm. AA. (in two twin mounts), 5—20 mm. AA.
A S weapons :	1 Mk. 10 Ahead Throwing Weapon ; 6 K guns ; 2 depth charge racks aft.
Machinery :	Triple expansion. 2 shafts. I.H.P. : 5,500 = 20 kts.
Boilers :	2, of 3-drum type
Oil fuel :	646 tons

General Notes.—Modernized with new guns and fire control equipment at New York Naval Shipyard 1952. Formerly known as *Teniente Ferré* and *Teniente Palacios*, respectively.

Historical Notes.—Named after two officers of the Peruvian ironclad *Huascar* at the Battle of Angamos, when she was captured by the Chileans after a stubborn resistance, in which both were killed.

Pendant No.	Name	Builders	Launched	Completed
F 3	Ferré	Canadian Vickers, Ltd., Montreal	21 Apr. 1944	17 Sep. 1944
F 2	Palacios	Quebec Shipbuilding Co., Lauzon, P.Q.	1 Dec. 1943	22 Aug. 1944
F 1	Gálvez	Walter Butler, Superior, Wis.	27 Sep. 1943	27 July 1944

Frigates—continued.



1951, Peruvian Navy, Official.

GÁLVEZ (ex-U.S.S. Woonsocket)

Displacement	1,430 tons (2,415 tons full load)
Dimensions :	285½ (w.l.), 304 (o.a.) × 37½ × 13½ feet
Guns :	3—3 inch, 50 cal., 4—40 mm. AA. (in two twin mounts), 4—20 mm. AA., 2 M.G. AA.
A S Weapons :	1 Mk. 10 Ahead throwing weapon; 6 K guns; 2 depth charge racks aft
Machinery :	Triple expansion. 2 shafts. I.H.P. : 5,500 = 19 kts.
Boilers :	2, of 3-drum type
Oil fuel	748 tons

Notes.—Laid down 12 Aug. 1943. Overhauled at Norfolk (Va.) Navy Yard, 1952. Formerly known as *Teniente Gálvez*. See table.

Minelaying Destroyer.



1951 Peruvian Navy, Official.

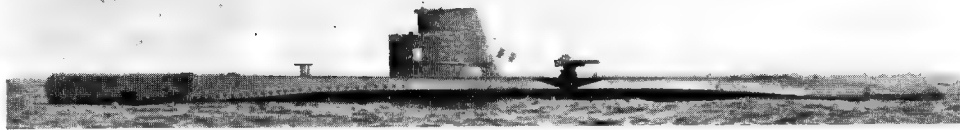
VILLAR (ex-Vambola, ex-Russian Spartak, ex-Mikula Maklei)

Builders :	Putilov Works, Petrograd
Launched :	1915
Completed :	1918
Displacement :	1,585 tons (1,660 tons deep oad)
Dimensions :	315½ × 30½ × 12½ feet
Guns :	4—4 inch, 60 cal., 4—20 mm. AA.
Tubes :	9—18 inch, in triple deck mountings
A S weapons :	2 Depth charge racks aft.
Machinery :	A.E.G. Curtis turbines. S.H.P. : 30,000 = 30 kts.
Boilers :	4 Thornycroft.
Oil fuel :	420 tons
Radius :	2,400 miles at 15 kts.
Complement :	142

Notes.—Designed to carry and lay 80 mines. Captured from Russian Navy by British Navy in the Baltic in December, 1918, and transferred to Estonia, from whom she was purchased by Peru in 1933. Used for administrative and training purposes. Formerly known as *Almirante Villar*.

## Submarines.

### 2 "Lobo" Class.



TIBURON.

1954, Peruvian Navy, Official.

#### LOBO (6 Feb. 1954)

Displacement : 825 tons standard, 1,400 tons submerged  
Dimensions : 243 (o.a.) × 22 (max.) × 14 (max.) feet  
Guns : 1—5 inch, 25 cal.  
Torpedo tubes : 4—21 inch (bow), 2—21 inch (aft)  
Machinery : 2 General Motors Corporation single acting, two-cycle, non-reversible, type 278A. 2 shafts. B.H.P. : 2,400 (total) = 16 kts. (max.)

#### TIBURON (27 Oct. 1953)

Notes.—On 8 Dec., 1951 the Electric Boat Co., Groton, Connecticut announced they had been awarded a contract to build two modern submarines. Keels laid 12 May, 1952 for delivery in Feb. and May 1954. Launch dates above. Boats are of modified U.S. "Mackerel" class. Lobo means wolf, Tiburon means Shark

### 3 "R" Class.



R 3.

1951, Peruvian Navy, Official.

#### R 1 (April, 1926)

#### R 2 (May, 1926)

#### R 3 (April 21, 1928)

#### R 4 (May 10, 1928)

Displacement : 567 tons surface 755 tons submerged  
Dimensions : 186½ (o.a.), 178½ (pp.) × 17½ × 15 feet  
Guns : 1—3 inch  
Tubes : 4—21 inch (bow). 8 torpedoes carried  
Machinery : 2 Nelseco Diesel engines, B.H.P. : 880 = 14.5 kts (surface)  
Electric motors, H.P. : 1,000 = 9.5 kts. (submerged)  
Radius : 8,000 miles  
Complement : 30

Notes.—Built by Electric Boat Co., Groton, Conn. Launch dates above. R 3, R 4 delivered in summer of 1928. R 1, R 2 were refitted at builders' yard in 1935, R 3 and R 4 in 1936. All overhauled in United States, 1950.

## Transports.

#### CALLAO (ex-Monserrate)

Builders : Bremen Vulkan Yard, Bremen-Vegesak  
Launched : 1938  
Measurement : 5,578 tons gross  
Dimensions : 459 × 56 × 22 feet (depth 35 feet)  
Machinery : Diesel motors.  
Speed : 16 kts.

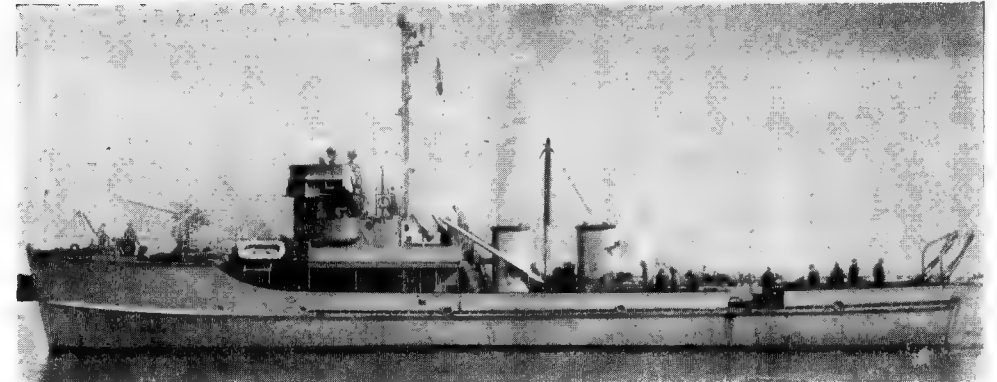
Notes.—Former Hamburg America liner. Seized April 1, 1941 by Peruvian Government, after scuttling by Germans.

#### RIMAC (ex-Eten, ex-Rhakotis)

Builders : Blohm & Voss, Hamburg  
Launched : 1907  
Measurement : 6,848 tons gross  
Dimensions : 485½ × 53 × 26 feet  
Machinery : 2 reciprocating engines. 2 shafts. I.H.P. : 3,200 = 12 kts.  
Coal : 1,600 tons

Notes.—Both above are transports and cargo ships.

## Minesweepers.



BONDY.

1953, Peruvian Navy Official.

#### BONDY (ex-YMS 25)

#### SAN MARTIN (ex-YMS 35)

Displacement : 300 tons (325 tons full load)  
Dimensions : 136 × 24½ × 6 feet  
Guns : 1—3 inch, 2—20 mm. AA.  
Machinery : 2 G.M. Diesels. B.H.P. : 1,000 = 15 kts. (max.), 11 kts. economical speed.  
Fuel : 20 tons

Notes.—Built New York. Both launched 1942. Acquired from U.S.A. 1947. Formerly known as *Alférez de Fragata Bondy* and *Guardiamarina San Martin*, respectively.

## Tank Landing Ship.



CHIMBOTE.

1953, Peruvian Navy Official.

#### CHIMBOTE (ex-M/S Rawhiti, ex-U.S.S. LST 283)

Builders : American Bridge Company, Ambridge, Pennsylvania  
Completed : November, 1943  
Displacement : 1,625 tons standard, 4,050 tons full load  
Dimensions : 328 (o.a.), 315 (pp.) × 50 × 14½ (max.) feet  
Guns : 1—3 inch  
Machinery : Diesel. 2 shafts. B.H.P. : 1,700 = 10 kts.  
Oil fuel : 600 tons (oil tanks) : 1,100 tons (ballast tanks)  
Radius : 24,000 miles at 9 kts.

Notes.—Sold to Peru by British firm in 1951. Accommodation for 16 officers and 130 men.

## Fleet Supply Ship

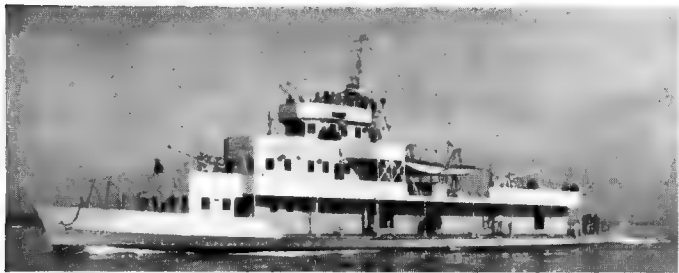
#### CABO BLANCO (ex-Mariscal Castilla, ex-Preserver)

Displacement : 3,450 tons standard  
Measurement : 2,436 tons gross  
Dimensions : 265 × 43 × 17 feet  
Machinery : Diesel. 2 shafts. B.H.P. : 1,150 = 9 kts.

Notes.—Built by Marine Industries, Canada, 1941-43. Purchased from Royal Canadian Navy 1946. Fleet supply ship and oiler.

PERU—River Gunboats, Motor Launches, Tugs, etc.

River Gunboats.



UCAYALI. Added 1952, courtesy John I. Thornycroft & Co. Ltd.

MARAÑON	UCAYALI
Displacement :	365 tons full load
Dimensions :	154½ (w.l.) × 32 × 4 (max.) feet
Guns :	2—3 inch, 50 cal., d.p., 7—20 mm. AA. 12 twin, 3 single
Machinery :	Two sets British Polar Diesel engines. Type M441.
	B.H.P. : 800 = 12 kts (normal)
Range :	6,000 miles without refuelling.
Complement :	40
Notes.—Ordered early 1950. Employed on police duties in Upper Amazon. Specially designed for carrying naval officers and men under tropical conditions. Very shallow draught. Superstructure of aluminium alloy. Mechanical ventilation. Based on Iquitos.	
Name	Builders
Marañon	John I. Thornycroft & Co. Ltd.
Ucayali	Woolston, Southampton
	Launched
	Apr., 1951
	Completed
	7 Mar., 1951
	June, 1951

AMAZONAS	LORETO
Displacement :	250 tons standard
Dimensions :	145 × 22 × 4 feet
Guns :	2—3 inch, 1—47 mm., 2—20 mm. AA.
Machinery :	Diesel B.H.P. : 750 = 15 kts.
Complement :	35
Notes.—Designed and built by Electric Boat Co., Groton, Conn. Launched 1934.	
NAPO	
Builders :	Yarrow
Launched :	1920
Displacement :	98 tons
Dimensions :	100 (pp.), 101½ (o.a.) × 18 × 3 feet
Guns :	3—47 mm. (3 pdr.), 2 M.G. AA.
Machinery :	Triple expansion. I.H.P. : 250 = 12 kts.
Boilers :	Yarrow
Complement :	22
Notes.—Steel. Now converted from wood to oil fuel burning. Upper Amazon.	

<b>NAPO</b>	
Builders :	Yarrow
Launched :	1920
Displacement :	98 tons
Dimensions :	100 (pp.), $101\frac{1}{2}$ (o.a.) $\times$ 18 $\times$ 3 feet
Guns :	3—47 mm. (3 pdr.), 2 M.G. AA.
Machinery :	Triple expansion. I.H.P. : 250 = 12 kts.
Boilers :	Yarrow
Complement :	22
Notes.—Steel. Now converted from wood to oil fuel burning. Upper Amazon.	
<b>AMERICA</b>	
Launched :	1904
Displacement :	240 tons
Dimensions :	$133 \times 19\frac{1}{2} \times 4\frac{1}{2}$ feet
Guns :	2—3 pdr., 4—12.7 mm. AA.
Machinery :	I.H.P. : 350 = 14 kts.
Complement :	26
Notes.—Built in U.S.A. Steel. Converted from coal to oil fuel burning. Upper Amazon Flotilla.	

<b>PORTILLO</b> ( <i>ex-San Pablo</i> )	
Launched :	1902
Displacement :	49 tons
Dimensions :	80½ × 16½ × 4 feet
Guns :	2—47 mm., 2 M.G. AA.
Machinery :	Compound engines. Speed under 7 kts.
<i>Notes.</i> —Built in Germany. Formerly known as <i>Coronel Portillo</i> .	
<b>IQUITOS</b>	
Launched :	1875
Displacement :	50 tons
Dimensions :	77 × 12 × 7½ feet
Guns :	2—37 mm., 2—20 mm., 2 M.G. AA.
Speed :	7.5 kts.
<i>Notes.</i> —Built in France. Rebuilt 1896. <i>Iquitos</i> and <i>Portillo</i> are converted merchant vessels.	

Landing Craft



BT 3.	Peruvian Navy, Official.
BT 1 (ex-LCT 501)	BT 3 (ex-LCT 855)
Displacement :	309 tons (full load)
Dimensions :	119 × 32½ × — feet
Machinery :	Diesel. 3 shafts. B.H.P. : 675 = 10 kts.
Notes.—Built in U.S.A. 1943-44. A landing craft to train troops in amphibious operations has been ordered.	

Motor Launches.



CS 6.			1951, Peruvian Navy, Official.		
CS 1	CS 2	CS 3	CS 4	CS 5	CS 6
Displacement :		45 tons			
Dimensions :		83 × 16 × 4½ feet			
Guns :		1—20 mm. AA., 2 M.G.			
Machinery :		2 petrol motors. H.P. : 1,200 = 20 kts. (now less)			
Complement :		10			

Notes.—Built New York 1943. Wooden construction. All transferred from U.S. Coast Guard in 1943-44. Ex-U.S.C.G.C. 83422, 83423, 83495, 83496, 83315, 83328.

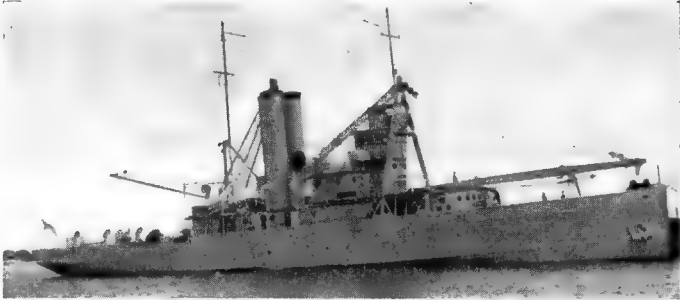
Fleet Oilers.

SECHURA	
Dimensions :	360 (w.l.) × 52 (breadth moulded) × 21½ (draft loaded) feet
Machinery :	Diesel Engine Type 562 VTF-115, made by Burmeister & Wain, Copenhagen, Denmark, B.H.P. : 2,400
Notes.—Keel laid by John I. Thornycroft & Co. Ltd., Woolston, Southampton, late 1952, for delivery mid 1954. 6,000 tons deadweight (all told).	
TALARA	
Dimensions :	336½ × 50½ × 22½ feet
Machinery :	Diesel Engine Type 562, VTF-115, made by Burmeister. B.H.P. : 2,400
Notes.—Keel laid early 1953 by Burmeister & Wain's Maskin-Og Skibsbysgeri, Copenhagen for delivery during 1954. 4,800 tons deadweight (about 35,000 barrels).	

Fleet Oilers—continued.

PARIÑAS (ex-Sjömard, Thornycroft)	
Launched :	1921
Displacement :	2,820 tons gross
Dimensions :	300 × 44 × 21½ feet
Machinery :	Triple expansion. I.H.P. : 1,400 = 10 kts.
Oil fuel :	560 tons
Cargo tanks :	4,300 tons
Note.—Acquired 1933.	

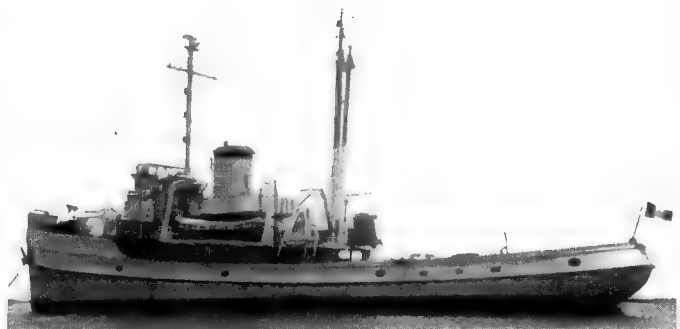
Submarine Salvage Vessel.



1953, Peruvian Navy, Official.

RIOS	
Displacement :	2,400 tons standard
Dimensions :	180 (o.a.) × 43 × 19 feet
Machinery :	Triple expansion. I.H.P. : 1,200 = 10 kts.
Notes.—Formerly known as Guardian Rios. Operates under the Callao Port Authority.	

Tugs.

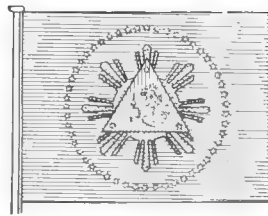


1951, Peruvian Navy, Official.

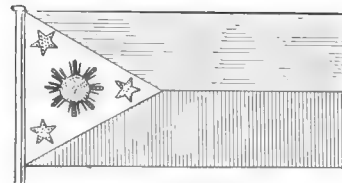
SELENDON (ex-ATR 31)	OLAYA (ex-ATR 25)
Displacement :	852 tons
Dimensions :	165½ × 33½ × 13½ feet
Machinery :	Triple expansion. I.H.P. : 1,600 = 12 kts.
Notes.—Built in U.S.A. 1943-44. Of wooden construction. Formerly known as Condestable Selendón and José Olaya respectively.	

# PHILIPPINES

## Flags



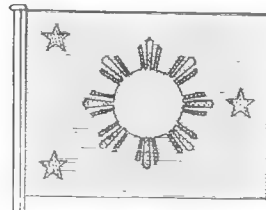
PRESIDENT



NATIONAL



PENDANT



JACK

**National Flag** (5-0' × 9-5'): blue and red (horizontal) with a white canton charged with a gold sun (with 8 rays) and three gold stars.

**President's Flag** (3-6' × 5-1'): blue with red triangle (containing gold sun-dolphin holding sword, and three stars) superimposed on a gold sun and encircled by 50 gold stars.

**Jack** (2-7' × 3-9'): blue with gold sun and three gold stars.

**Pendant** (0-15' × 4-0'): white (with three gold stars) blue and red.

## Administration

**Flag Officer in Command, Philippine Navy:** Commodore J. Francisco, P.N.

Ships' names are prefaced by R.P.S. (Republic of Philippines Ship). Philippine naval vessels were assigned new names and hull numbers early 1953. Names adopted are geographical locations, mostly provinces.

## Naval Acquisition Programme.

The Philippine Navy plans to acquire 6 destroyer escorts (DEs), 6 patrol vessels (YPs), 2 fleet minesweepers (AMs), 1 attack cargo ship (AKA) and light cargo ships FS(AKL) in the immediate future.

## Personnel.

2,909 naval personnel, 10 naval air personnel.

## Mercantile Marine

Lloyd's Register appendix, 1954: 101 vessels of 155,406 tons.

## Escort Patrol Vessels



CEBU.

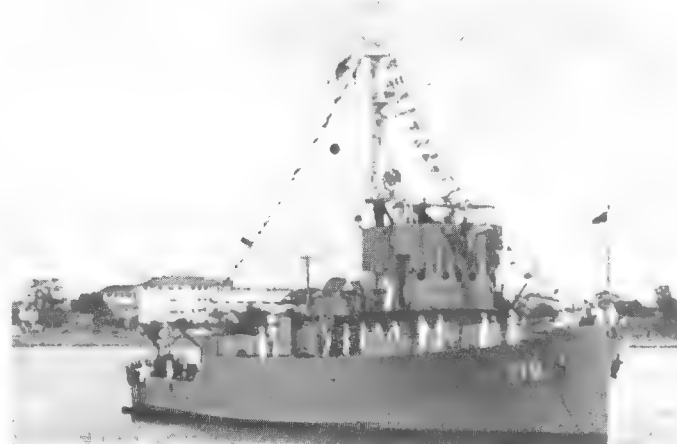
1953, Philippine Navy, Official.

**CEBU E 28** (ex-PCE 881)  
**ILOILO E 32** (ex-PCE 897)

**LEYTE E 30** (ex-PCE 885)  
**NEGROS OCCIDENTAL E 29** (ex-PCE 884)  
**PANGASINAN E 31** (ex-PCE 891)

Displacement: 600 tons (900 tons full load)  
Dimensions: 184½ (o.a.) × 33 × 9½ feet  
Guns: 1—3 inch, 3—40 mm. (E31, 6—40 mm.) AA., 4—20 mm.  
Machinery: Diesel. 2 shafts. B.H.P.: 1,800 = 20 kts.  
Complement: 81

Notes.—Philippine Naval Patrol.



SAMAR.

1953, Philippine Navy, Official.

**SAMAR 33** (ex-U.S.S. Project, AM 278)

Displacement: 850 tons (945 tons full load)  
Dimensions: 184½ (o.a.) × 33 × 9½ feet  
Guns: 1—3 inch, 4—40 mm. AA., 4—20 mm.  
Machinery: Diesel. 2 shafts. B.H.P.: 1,800 = 18 kts.  
Complement: 104

Notes.—Built by Gulf S.B. Corp., Steel. Former U.S. fleet minesweeper. Originally a sister ship of Apo, Presidential Yacht. No minesweeper gear. Used as an escort patrol vessel.

## Patrol Gunboats.

**PGM 33**  
**PGM 34**

Dimensions :  
Guns :  
Machinery :

**PGM 35**  
**PGM 36**

Length 110 feet  
1—60 mm. mortar, 2—40 mm. AA., 4—50 cal. M.G.  
Diesel

**PGM 37**  
**PGM 38**

Notes.—New construction. Built by Georgia Shipbuilding Co. (formerly MacDonnell boats) St. Mary's, Georgia. Have the basic design of the former 110 ft. SC type of the U.S. Navy. Delivered to Philippine Navy 1954.

## Presidential Yacht



APO.

1952, Philippine Navy, Official.

**APO 21** (ex-U.S.S. Quest, AM 281)

Displacement: 850 tons standard, 881-98 tons normal (945 tons full load)  
Dimensions: 184½ (o.a.) × 33 × 9½ feet  
Guns: 1—3 inch, 4—20 mm. AA.  
Machinery: Diesel. 2 shafts. B.H.P.: 1,800 = 16 kts. (designed).  
Cruising speed: 9 kts., max. 14 kts.  
Complement: 45 (four officers, 40 enlisted men)

Notes.—Built by Gulf S.B. Corp., Steel. Cruising range of 5,600 miles and 23 days. Converted vessel, former fleet minesweeper.

## Patrol Vessels.



NUEVA ECIIJA.

1953, Philippine Navy, Official.

**BATANGAS P 24** (ex-PC 1134)  
**BOHOL P 22** (ex-PC 1131)  
**CAPIZ P 27** (ex-PC 1564)

**NEGROS ORIENTAL P 26** (ex-PC 1563)  
**NUEVA ECIIJA P 24** (ex-PC 1134)  
**ZAMBOANGA DEL SUR P 23** (ex-PC 1133)

Displacement: 330 tons (450 tons full load)  
Dimensions: 173½ (o.a.) × 23 × 6 feet  
Guns: 1—3 inch d.p., 1—40 mm. AA., 5—20 mm. AA.  
Machinery: 2 G.M. 2-stroke Diesels. 2 shafts. B.H.P.: 3,600 = 22 kts.  
Complement: 60.

Notes.—Camarines Sur, P 21 (ex-PC 1121) and Ex-PC 1122 sold.



PHILIPPINES—Patrol Vessels, Landing Ships, Auxiliaries.

Patrol Vessels—continued.



LAGUNA. 1953, Philippine Navy, Official.  
**LAGUNA P 12** (ex-PCS 1403)  
Displacement: 230 tons (300 tons full load)  
Dimensions: 136 (o.a.) × 24½ × 8½ feet  
Guns: 1—3 inch, 1—40 mm., 4—20 mm.  
Machinery: Diesel. B.H.P.: 1,000 = 14.5 kts.  
Complement: 42

Notes.—YMS 57, 335 sold.



ALERT. 1953, Philippine Navy, official.  
**ALERT P 14** (ex-SC 1267)  
**CAGAYAN P 13** (ex-SC 731)  
**CAVITE P 19** (ex-SC 981)  
**ILOCUS NORTE P 20** (ex-SC 1274)  
Displacement: 85 tons (130 tons full load)  
Dimensions: 111 (o.a.) × 17 × 6 feet  
Guns: 1—40 mm. AA., 3—20 mm. AA.  
Machinery: Diesels. 2 shafts. B.H.P.: 1,000 = 18 kts.  
Complement: 28

Notes.—SC 732, 743, 982, 1269, 1278 scrapped. SC 699, 769 sold.

Survey Ships.

**ANEMONE** **SEQUOIA**  
Displacement: 1,057 tons  
Dimensions: 190 × 30 × 13 feet  
Machinery: Triple expansion, 2 shafts. I.H.P.: 1,000 = 12 kts.

Note.—Orchid and Tulip were transferred from the Philippine Navy to the Philippine Coast and Geodetic Survey. Ex-U.S. Coast Guard buoy tenders. Anemone and Sequoia in Philippine Navy Reserve.

Coastguard Vessels.

101 102 104 106 108 110 112  
101 103 105 107 109 111  
Notes.—Ex-U.S.C.G.C. 100-112. All active. No names assigned.

Landing Ships.



MIGAMIS ORIENTAL. 1953, Philippine Navy, Official.  
**ALBAY 39** (ex-LST 865)  
**BULACAN 38** (ex-LST 843)  
**COTABATO 36** (ex-LST 75)  
Displacement: 1,625 tons (light), 4,080 tons (loaded)  
Dimensions: 316 (w.l.), 328 (o.a.) × 50 × 14 (max.) feet  
Guns: 7—40 mm. AA., 2—20 mm. AA.  
Machinery: Diesel. 2 shafts. B.H.P.: 1,800 = 12 kts.  
Complement: 90

Note.—Ex-LST 75 launched 7 April 1943. LST 72 sold. LCU 117 sold.

**DAVAO 34** (ex-LCI 1058) **LANAO 35** (ex-LCI 1059)  
Displacement: 173 tons (381 tons full load)  
Dimensions: 159 (o.a.) × 23½ × 5½ feet  
Guns: 5—20 mm.  
Machinery: Diesel. 2 shafts. B.H.P.: 1,320 = 14 kts.  
Complement: 43

Notes.—Former United States Landing Craft. Employed as lighthouse tenders.

Rescue Tug.



IFUGAO. 1953, Philippine Navy, Official.  
**IFUGAO 44** (ex-ATR 96)  
Displacement: 852 tons  
Dimensions: 143 × 33 × 13½ feet  
Guns: 1—3 inch, 2—20 mm.  
Machinery: Diesel Electric. B.H.P.: 1,875 = 14 kts.  
Complement: 33

Note.—Returned to U.S. from United Kingdom.

Tugs.

**IGOROT 222** (ex-YTL 554) **MARANAO 221** (ex-YTL 572)  
Note.—Small harbour tugs.  
**MANGYAN 223** (ex-ST 1312)

Auxiliary Ships

**LAKE LANO 42** (ex-YW 125)  
Displacement: 1,235 tons full load  
Dimensions: 174 (o.a.) × 32 × 15 (max.) feet  
Guns: 2—20 mm.  
Machinery: Diesel. B.H.P.: 640 = 9 kts.  
Complement: 21

Note.—Water carrier.



LAKE NAUJAN. 1953, Philippine Navy, Official.  
**LAKE NAUJAN 43** (ex-YO 173)  
Displacement: 521 tons (1,400 tons full load)  
Dimensions: 174 (o.a.) × 32 × 13½ (max.) feet  
Guns: 2—20 mm.  
Machinery: Diesel. B.H.P.: 560 = 8 kts.  
Complement: 21

**LAKE TAAL 41** (ex-Y 19)  
Displacement: 484 tons (1,300 tons full load)  
Dimensions: 162½ (o.a.) × 27 × 12 (max.) feet  
Guns: 2—50 cal. Browning M.G.  
Machinery: Diesel. B.H.P.: 4,000 = 6 kts.

Lighthouse Tenders

**BOJEADUR 46** (ex-FS 203) **LAUIS LEDGE 45** (ex-FS 185)  
Displacement: 470 tons (811 tons full load)  
Dimensions: 180 (o.a.) × 32 × 10 feet  
Machinery: Diesel. 2 shafts. B.H.P.: 1,000 = 11 kts.  
Complement: 43

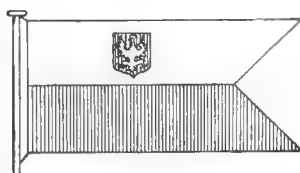


PEARL BANK. 1953, Philippine Navy, Official.  
**PEARL BANK 47** (ex-OL 4)  
Displacement: 162 tons (301 tons full load)  
Dimensions: 120 (o.a.) × 24 × 8 feet  
Guns: 2—20 mm.  
Machinery: Diesel. 2 shafts. B.H.P.: 240 = 6 kts.  
Complement: 43

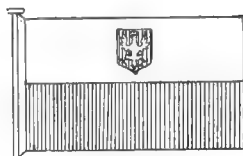
Notes.—There are also 3 PYs (Patrol Yachts) and 22 service craft.

# POLAND

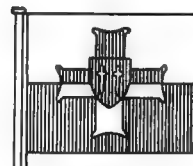
## Flags.



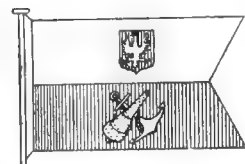
ENSIGN



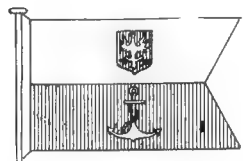
MERCANTILE ENSIGN



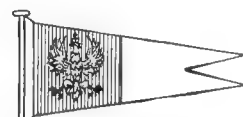
JACK



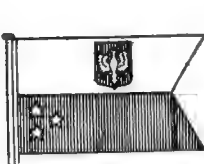
MINISTER OF WAR



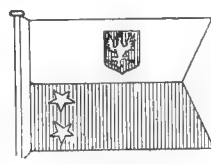
CHIEF OF NAVAL DEPARTMENT



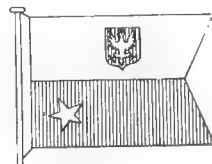
PRESIDENT'S  
BROAD PENDANT



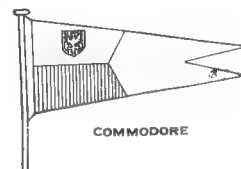
ADMIRAL



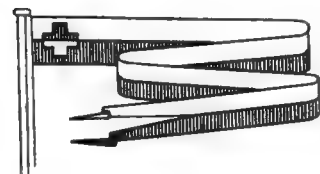
VICE ADMIRAL



REAR ADMIRAL



COMMODORE



PENDANT



Red



Yellow



White

## Administration.

Minister of National Defence : Marshal Konstanty Rokossowski.

Commander-in-Chief of the Navy : Rear-Admiral Chirokov

## Uniforms.



(a) Wice-  
Admiral.



Kontr-  
Admiral.



Komandor.



Komandor  
Porucznik.



Komandor  
Podporucznik.



Kapitan.



Porucznik.



Podporucznik.

(b) Vice-Admiral. Rear-Admiral.

Captain.

Commander.

Commander. Lieut.-Commr.

Lieutenant.

Sub-Lieut.

(a) = Polish rank.

(b) = Equivalent British rank.

## Ships.

Polish warships are referred to officially with the prefix O.R.P.

## Silhouettes.



BLYSKAWICA.



BURZA.



CZAJKA Class.

## Mercantile Marine.

Lloyd's Register appendix, 1954 : 140 vessels of 281,621 tons gross.

## POLAND—Destroyers, Submarines, Coastal Craft

### 2 Destroyers (Kontrtorpedowe).



BLYSKAWICA.

1943 Official

#### BLYSKAWICA

Builders : J. Samuel White & Co., Ltd., Cowes.  
 Launched : 1 Oct., 1936  
 Displacement : 2,144 tons standard, 3,383 tons full load  
 Dimensions : 357 (pp.), 374 (o.a.) × 37 × 10½ feet  
 Guns : 8—4 inch AA., 4—47 mm. AA., 4—20 mm. AA., 4 M.G.  
 Tubes : 6—21 inch (tripled). 2 D.C.T.  
 Mines : Can carry 7  
 Machinery : Parsons geared turbines. 2 shafts. H.P. : 54,000 = 39 kts.  
 Boilers : 4, of 3-drum type  
 Complement : 180

Notes.—Name means Lightning. Fitted for minelaying.



BURZA

1951, C. Parsons, Esq.

#### BURZA

Builders : Chantiers Navals Français, Blainville  
 Laid down : 1 Nov., 1926  
 Launched : 16 April, 1929  
 Completed : 1930  
 Displacement : 1,515 tons standard, 2,430 tons full load  
 Dimensions : 344 (w.l.), 351 (o.a.) × 29 × 9½ feet  
 Guns : 2—5.1 inch, 1—3 inch AA., (see notes), 4—20 mm., 4—2 pdr.  
 Tubes : 3—21 inch, in triple deck mounting  
 Machinery : Geared turbines (supplied by At. & Ch. de la Loire). 2 shafts. S.H.P. : 35,000 = 33 kts.  
 Boilers : 3 small-tube (reported to be worn out)  
 Fuel oil : 300 tons  
 Complement : 145

General Notes.—Design of this vessel closely follows that of French *Simoun* class. Meaning of name is Squall. Was returned to Poland by Great Britain in March 1951. Sister ship *Wicher* (Hurricane) sunk at Gdynia, Sept., 1939.

Gunnery Notes.—Reported that most recent armament included one U.S. pattern 5-inch gun in "Y" position, one British pattern 3-inch AA. weapon in "Q" position, and one gun in "B" position.

### Submarines (Okrety Podwodne).



SEP

Builders : Rotterdam Dry Dock Co.  
 Laid down : 1936  
 Launched : 17 Oct., 1938

Displacement : 1,092 tons surface ; 1,450 tons submerged  
 Dimensions : 273½ (pp.), 275½ (o.a.) × 22 × 13 feet  
 Guns : 1—4.1 inch, 2—40 mm. AA.  
 Tubes : 8—21 inch. Fitted for minelaying  
 Machinery : 2 Sulzer Diesels. B.H.P. : 4,740 = 19 kts. surface ; H.P. : 1,000 = 9 kts submerged  
 Complement : 56

Notes.—This name means Vulture. A sister ship, the *Orzel* (Eagle), paid for by the Polish Navy League, was lost in June, 1940.



WILK

Photo courtesy of Messrs. Augustin, Normand.

3 Normand-Fénaux type

RYS (At. & Ch. de la Loire, Nances, April 22, 1929)

WILK (Ch. & At. Augustin Normand, Le Havre, April 12, 1929.)  
 ZBIK (Ch. Navals Français, Blainville, June 14, 1930)

Displacement : 965 tons surface ; 1,250 tons submerged  
 Dimensions : 246 × 18 × 13 feet  
 Guns : 1—3.9 inch  
 Tubes : 6—21.7 inch. Carry 10 torpedoes  
 Mines : 38  
 Machinery : 2 set Vickers Normand Diesels B.H.P. : 1,800 = 14 kts. (surface).  
 Electric motors, H.P. : 1,200 = 9 kts. (submerged)  
 Radius : 3,500 miles (surface at 10 kts.), 100 miles (submerged)

Notes.—Diving limit : 44 fathoms. Meanings of names are as follows : Rys, Lynx ; Wilk, Wolf ; Zbik, Wild Cat, Wilk, prototype of the class, was returned to Poland by Great Britain in March 1951. All were built to Normand plans. Are distinguished by initials of names, painted on C.T. Builders and launch dates above.

### Motor Torpedo Boats.

Ex-MTB 76

Ex-MTB 116

Guns : 1—20 mm. AA., 4 M.G.  
 Tubes : 2 torpedoes  
 Speed : 38 kts.

Notes.—Ex-Russian, possibly of American PT type. Wood. Launched 1944-45.

### Motor Gunboats.

S 1

S 2

Note.—Returned to Poland by Great Britain in March 1951.

## Coastal Minesweepers (Wylawiaczemin).



ORLIK (AL) JASKOLKA (ex-T 465) (JK) KANIA (KN) KONDOR (KD) KORMORAN (KR) ORLIK (OL)  
ZAPLA (CP) JASTRZĄB (JS) KROGULEC (KG)

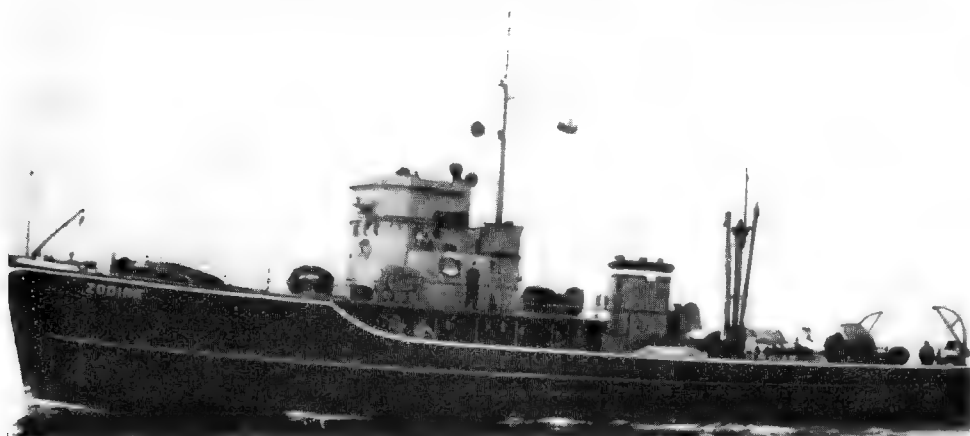
Added 1951, M. J. Meister.

Displacement : 130 tons  
Dimensions : 100 × 16 × 4½ feet  
Guns : 2—20 mm. AA. 4. M.G.  
Machinery : Diesel. 3 shafts. B.H.P. : 480 = 10 kts.  
Complement : 32

Notes.—Ex-T 228, 243, 244, etc. All built in Russia, 1944-45. Same type as Russian T 371 class. Engines are American. Respective meanings of above names (which are abbreviated to letters painted on bows for identification, as shown against each) are: Albatross, Heron, Swallow, Hawk, Kite, Condor, Cormorant, Sparrowhawk, Eaglet.

CZAJKA (April 10, 1935) MEWA (1935) RYBITWA (April 26, 1935) ZURAW (Aug. 22, 1938)  
Displacement : 142 tons (183 tons full load)  
Dimensions : 139½ × 21½ × 5½ feet  
Guns : 5 M.G. except Zura, none  
Machinery : Diesel. B.H.P. : 1,040 = 15 kts.  
Complement : 30

Notes.—All built in Poland, Mewa and Zura at Gdynia, Czajka and Rybitwa at Modlin. Launch dates above. Recovered from German hands in 1945. Czajka (meaning Lapwing) had been renamed Westerplatte, and Zura (Crane), Oxhoft. Mewa means Seagull, and Rybitwa, Tern ; these two were numbered MT 6 and 7, respectively, by the Germans. Zura is used as a surveying vessel, HG 11.



DELFIN (DF) FOKA (FK) MORS (MS) ZODIAK (ZD)

Added 1951, M. J. Meister.

Displacement : 215 tons  
Dimensions : 136 (o.a.) × 24½ × 6 feet  
Guns : 1—3 inch, 2—20 mm. AA.  
Machinery : Diesels. B.H.P. : 1,000 = 13 kts.

Note.—Former British BYMS. Zodiac is employed as a surveying vessel at present.

## Coastal Minesweepers, Motor Launches, etc.—POLAND

### Motor Launches.



SMIALY.

Added 1951, M. J. Meister.

BEZWZGLEDNY (BW) (ex-325)  
BLYSKAWICZNY (BL) (ex-326)  
BYSTRY (BS) (ex-327)  
DZIARSKI (DR) (ex-328)

DZIELNY (DL) (ex-329)  
KARNY (KR) (ex-368)  
NIEDOSCIGLY (ND) (ex-369)  
NIEUCHWYTNY (NW) (ex-370)

ODWAZNY (OW) (ex-371)  
SMIALY (SM) (ex-372)  
SPRAWNY (SP) (ex-546)  
SZYBKI (SZ) (ex-552)

Displacement : <40 tons  
Dimensions : 65 × 11 × — feet  
Guns : 1—20 mm. AA., 2 M.G., except Blyskawiczny with 2—20 mm. AA., 4 M.G.  
Machinery : Diesel  
Speed : 28 kts.  
Complement : 22

Notes.—Ex-Russian. Wood. Differentiated by letters painted on bows as noted against each name above. Blyskawiczny differs slightly from others in appearance. Meanings of these names are respectively ; Absolute, Lightning-swift, Acute, Brisk, Brave Disciplined, Inaccessible, Intractable, Courageous, Bold, Efficient, and Rapid.

### Training Ships.

ZETEMPOWIEC (ex-Apollo)

Measurement : 1,959 tons gross  
Speed : 10 kts.

ISKRA (1917)

Displacement : 560 tons  
Dimensions : 128 × 25 × 10 feet  
Machinery : Auxiliary motor. H.P. : 130 = 7.5 kts.  
Complement : 58

DAR POMORZA (1909)

Displacement : 1,561 tons  
Dimensions : 240 × 41 × — feet

### Surveying Vessel.

KOZIOROZEC

Displacement : 219 tons  
Dimensions : 111½ × 33 × 10½ feet  
Speed : 12 kts.

### Oiler.

STUTTHOF

Displacement : 450 tons

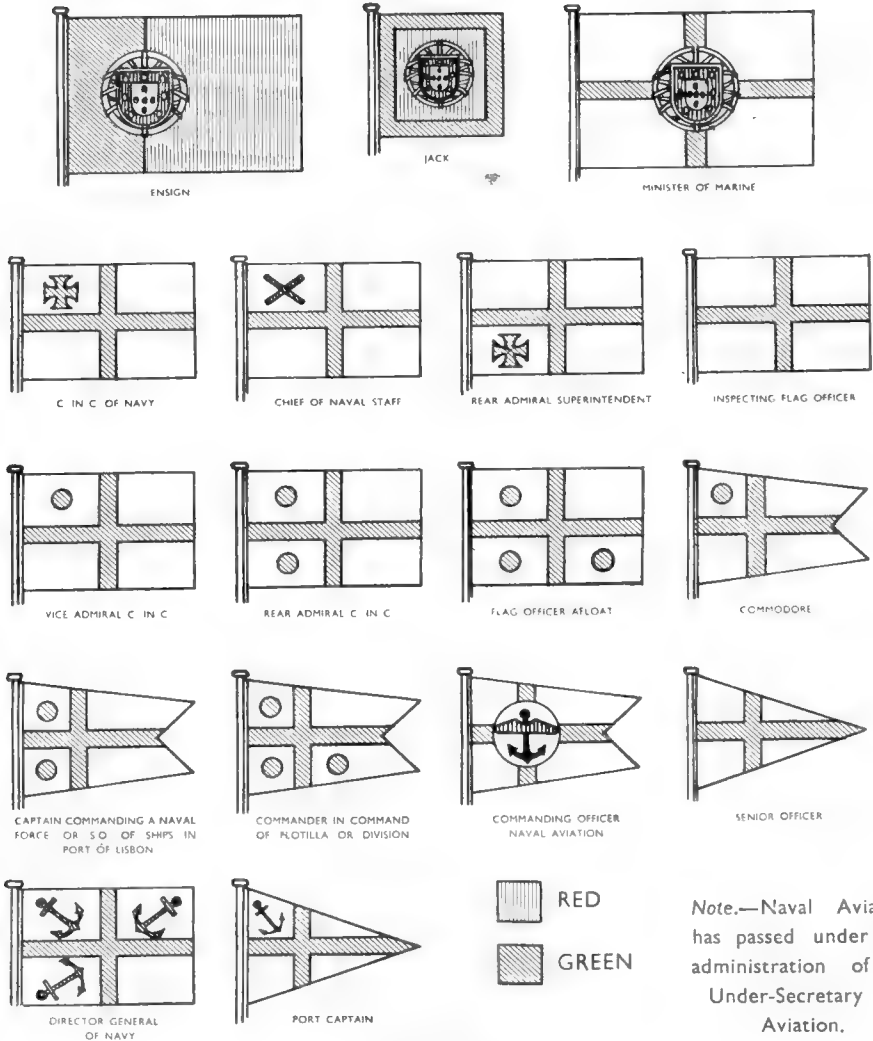
### Water Carrier.

PLEHMINDORF

Displacement : 500 tons

PORTUGAL

Flags.



Administration.

Minister of Marine : Rear-Admiral Américo Deus Rodrigues Tomas.  
Commander-in-Chief (Comandante Geral da Armada) : Vice-Admiral Joaquim Maria Alves Pereira da Fonseca.  
Chief of the Naval Staff : Rear-Admiral José Augusto Guerreiro de Brito.  
Naval Attaché London : Commander (Senior) Jacinto Neto Milheirico.

Uniforms.



Almirante.	Vice-almirante.	Contra-almirante.	Comodoro	Capitão de mare guerra.	Capitão de fragata.	Capitão-tenente.	Primeiro tenente.	Segundo tenente.	Sub-tenente.	Guarda-marinha.
Admiral.	Vice-Admiral.	Rear-Admiral.	Commodore	Captain.	Commander. (Senior.)	Commander. (Junior.)	Lieut.-Commander.	Lieut.	Sub-Lieut.	Midshipman.

The new substantive rank of *Comodoro*, equivalent to British *Commodore*, was established in 1953. (The Portugese Navy used to have *Comodoros* as a temporary rank, lasting only the duration of a commission).

Staff officers same but *without* executive curl.  
Sub-Tenente (*Sub-Lieutenant*) only in non-executive branches. There is also the rank of *Cadete* (*Cadet*).

Colour between stripes— <i>Surgeons</i> :	red;	On visor of cap— <i>Admirals</i> :	2 golden oak leaves
<i>Engineers</i> :	violet;	<i>Commodores</i> :	2 golden oak leaves
<i>Supply officers</i> :	blue;	<i>Captains</i> :	1 golden oak leaf
<i>Constructors</i> :	black.	<i>Commanders</i> :	1 narrow golden stripe

Chin strap of gold cord, but officers of lieutenant's rank and below have black chin straps.

Navy Estimates.

1950, Escudos 412,306,691.	1952, Escudos 397,953,649.	1954, Escudos 403,808,448.
1951, Escudos 423,313,985.	1953, Escudos 391,054,065.	

Personnel.

1953-54 : 860 officers and 6,375 men (boys not included.)

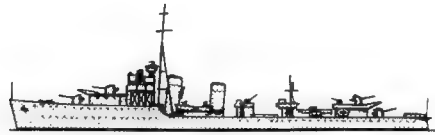
Ships.

Mode of address : N.R.P. " — " (Navio da Republica Portuguesa).  
Colour of Ships : Light grey, except Surveying Vessels, white with yellow funnels.

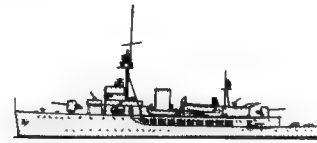
Mercantile Marine.

Lloyd's Register appendix, 1954 : 327 vessels of 553,838 tons gross.

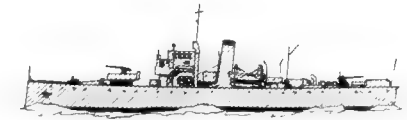




VOUGA Class.\*



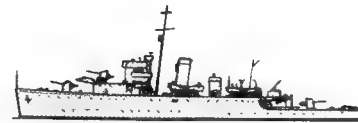
JOÃO DE LISBOA.\*



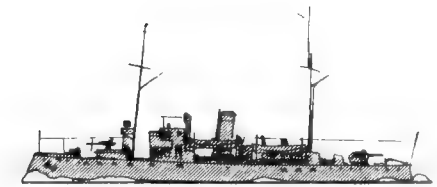
ZAIRE.



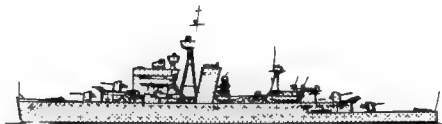
DIOGO GOMES, NUNO TRISTÃO.\*



GONÇALVES ZARCO Class.\*



DIU.



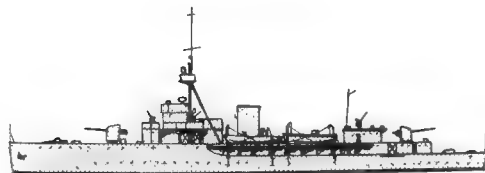
AFONSO DE ALBUQUERQUE Class.\*



ALMIRANTE LACERDA.\*



FARO Class.



PEDRO NUNES.



S. MIGUEL Class.



S. VICENTE Class.\*

PORTUGAL—Destroyers and Frigates

Destroyers (Contratorpedeiros).

5 “ Vouga ” Class.



VOUGA.

1953, Official.



DOURO.

1952, Wright & Logan.

DÃO	DOURO	LIMA	TEJO	VOUGA
Displacement : 1,238 tons standard (1,563 tons full load)				
Dimensions : 307 (pp.), 323 (o.a.) × 31 × 11 (mean) feet				
Guns : 4—4.7 inch, 50 cal., 3—40 mm. AA., 4 D.C.T.				
Tubes : 4—21 inch (quadrupled). Mine rails fitted and 20 mines carried,				
Machinery : Parsons geared turbines. S.H.P. : 33,000 = 36 kts.				
Boilers : 3 Yarrow (400 lb. pressure)				
Oil fuel : 296 tons normal, 345 tons max.				
Radius : 4,000 miles				
Complement : 179 normal, 184 full				

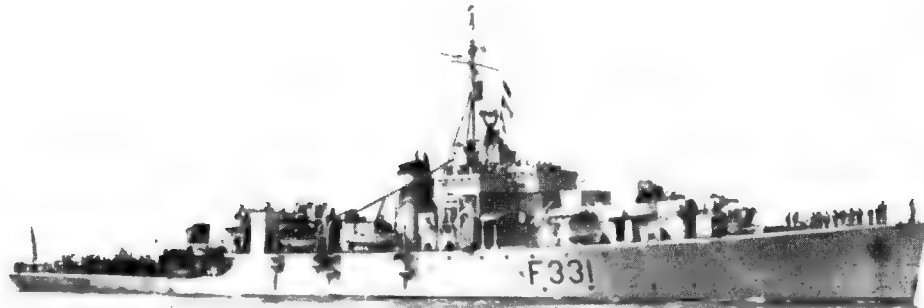
General Notes.—All Yarrow type. Vouga and Lima, constructed at Scotstoun by Yarrow, as were machinery and boilers of all five. Refitted 1946-49 by Yarrow, and Vickers-Armstrongs. Re-construction and modernisation included retubing of boilers, overhauling of main engines and auxiliaries, shortening of after funnel, new aluminium funnel casings, stepping of a new tripod foremast, increase in AA. armament and installation of Asdic equipment and radar. Two earlier ships of this class, originally named Douro and Tejo, were sold to Colombia, fresh ships with these names being built to replace them.

Engineering Notes.—First machinery trials gave speeds of 36-65 to 37 knots with ample margin of engine power and boiler capacity

Pendant Nos.	Name	Builders	Launched	Completed
D 331	Dão	Lisbon	27 July 1934	Jan. 1935
D 332	Douro	Lisbon	16 Aug. 1935	Feb. 1936
D 333	Lima	Yarrow	29 May, 1933	Nov. 1933
D 335	Tejo	Lisbon	4 May 1935	Oct. 1935
D 334	Vouga	Yarrow	25 Jan. 1933	June 1933

Frigates.

2 “ Diogo Gomes ” Class.



DIOGO GOMES.

1954, Official.



NUNO TRISTÃO.

1952, Wright & Logan.

DIOGO GOMES (ex-H.M.S. Awe)

NUNO TRISTÃO (ex-H.M.S. Avon)

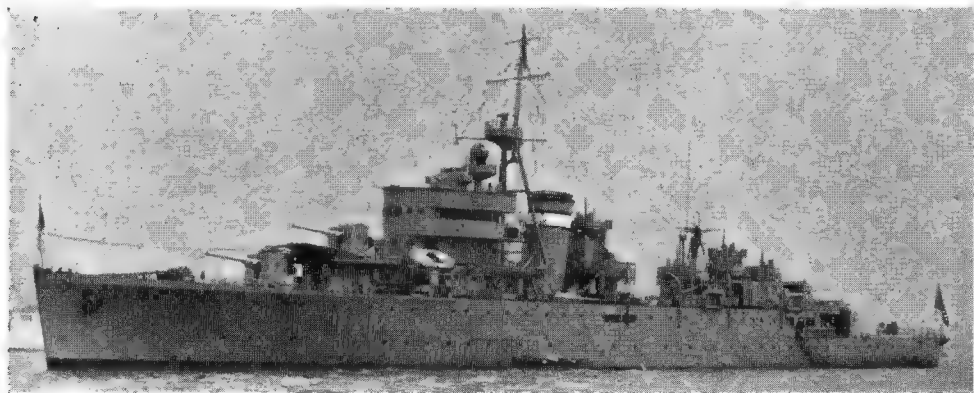
Displacement:	1,460 tons (actual), 1,370 tons (designed), standard (1,865 tons full load)
Dimensions :	283 (pp.), 301½ (o.a.) × 36½ × 12 feet
Guns :	2—4 inch, 6—40 mm. AA.
Machinery :	Triple expansion. 2 shafts. I.H.P. : 5,500 = 20 kts.
Boilers :	2 Admiralty 3-drum type
Oil fuel :	650 tons
Complement :	140

Notes.—Former “ River ” class frigates. Purchased from Great Britain in 1948 and transferred to Portugal May, 1949. These ships have shown very good endurance and sea-keeping qualities. Diogo Gomes no longer has a white band around the funnel.

Pendant No.	Name	Builders	Laid down	Launched	Completed
F 331	Diogo Gomes	Fleming & Ferguson, Ltd., Paisley	27 May 1943	28 Dec. 1943	21 Apr. 1944
F 332	Nuno Tristão	Charles Hill & Sons, Ltd., Bristol	8 Jan. 1943	19 June 1943	18 Sep. 1943

Frigates Rated as First Class Sloops (*Avisos de Primeira Classe*).

2 “Bartolomeu Dias” Class.



BARTOLOMEU DIAS.

1954, Wright & Logan.



AFONSO DE ALBUQUERQUE.

1952, R. M. Scott.

AFONSO DE ALBUQUERQUE

BARTOLOMEU DIAS

Displacement : 1,783 and 1,788 tons *standard*, respectively (2,434 and 2,439 tons *full load* respectively)  
Dimensions : 326½ × 44½ × 12½ feet (mean)  
Guns : 4—4·7 inch, 50 cal., 2—3 inch AA., 8—20 mm. AA., 4 D.C.T.  
Machinery : Parsons geared turbines. S.H.P. : 8,000 = 21 kts.  
Boilers : 2 Yarrow  
Oil fuel : 580 tons  
Radius : 8,000 miles at 10 kts.  
Complement : 189 (peace), 229 (war)

Notes.—Original contract placed with Otero-Terni-Orlando, 1931, cancelled 1932, and design modified by new builders when fresh contract was made. Both ships made 22 kts. on trials without being pressed. They are differentiated by the white band around funnel of *Bartolomeu Dias*. Designed for colonial service. Fitted to carry 40 mines.

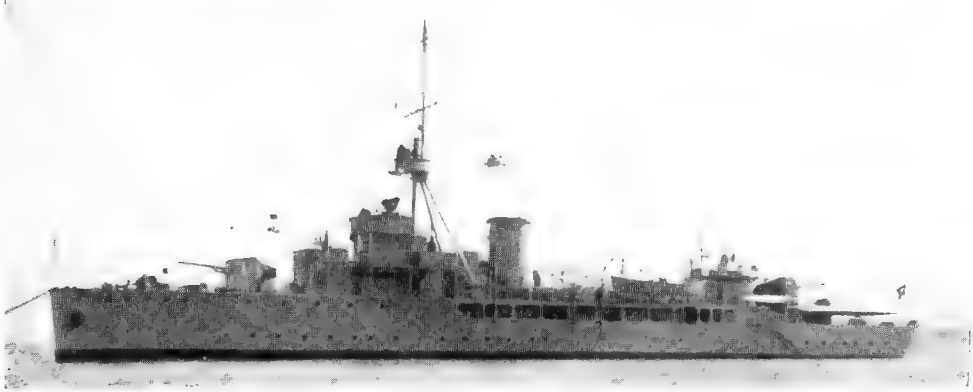
Name	Builders	Launched	Completed
Afonso de Albuquerque Bartolomeu Dias	R. & W. Hawthorn Leslie & Co.	28 May, 1934	Mar., 1935
		10 Oct., 1934	May, 1935

Frigates Rated as Second Class Sloops (*Avisos de Segunda Classe*)



JOÃO DE LISBOA.

1949, courtesy Com. Ramalho Rosa P.N.



PEDRO NUNES.

Added 1950, Official.

JOÃO DE LISBOA (ex-Infante D. Henrique)

PEDRO NUNES

Displacement : 1,091 and 1,090 tons *standard*, respectively (1,218 and 1,197 tons *full load*, respectively)  
Dimensions : *J. de Lisboa*, 234½ (pp.), *P. Nunes*, 223 (pp.) × 32½ × 9½ (mean), 10½ (max.) feet  
Guns : 2—4·7 inch, 50 cal., 4—20 mm. AA., 4 D.C.T.  
Machinery : 2 sets M.A.N. 8 cycle Diesels. B.H.P. : 2,400 = 16·5 kts.  
Oil fuel : 110 tons *normal*, 126 tons *max.*  
Radius : 8,850 miles at 12 kts., 4,800 at 16 kts.  
Complement : 112/138

Notes.—Unlike her sister ship, *Pedro Nunes* is not part of ten-year programme introduced in 1930. *João de Lisboa* has white band round funnel.

Name	Builders	Laid down	Launched	Completed
João de Lisboa Pedro Nunes	Naval Arsenal, Lisbon	1930	21 May, 1936	Aug., 1937
			1933	Apr., 1935

PORTUGAL—Frigates, Submarines, Patrol Vessels

Frigates Rated as Second Class Sloops (Avisos de Segunda Classe)—continued.



GONÇALO VELHO.

1951 Lieut. Jorge Wagner P.N.



GONÇALVES ZARCO.

Added 1950, Officer

GONÇALO VELHO

GONÇALVES ZARCO

Displacement : 950 tons standard (1,414 tons full load)  
Dimensions : 250 (bp.), 268 (o.a.) × 35½ × 11½ feet (mean)  
Guns : 3—4.7 inch, 50 cal., 5—20 mm. AA., 4 D.C.T.  
Machinery : Parsons geared turbines, 2 shafts. S.H.P. : 2,000 = 16.5  
Boilers : 2 Yarrow  
Oil fuel : 335 tons normal, 470 tons max.  
Radius : 9,831 miles at 11 kts.  
Complement: 128

Notes.—Mainmast now reduced to little more than a staff. On first full speed trials made a speed of 17.4 knots for four hours. Gonçalves Zarco has a white band around the funnel.

Name	Builders	Laid down	Launched	Completed
Gonçalo Velho	R. & W. Hawthorn, Leslie & Co.	9 Oct., 1931	3 Aug., 1932	May, 1933
Gonçalves Zarco		9 Oct., 1931	28 Nov., 1932	Sep., 1933

Submarines (Submersíveis).



NARVAL

1953 Lieut-Commander Vosgien Noronha, P.N.

NARVAL (ex-H.M.S. Spur)	NAUTILO (ex-H.M.S. Saga)	NEPTUNO (ex-H.M.S. Spearhead)
Displacement : 217 (o.a.) × 23½ × 10½ (mean) eet	715 tons (standard), 814 tons (surface), 990 tons (submerged)	
Dimensions :	217 (o.a.) × 23½ × 10½ (mean) eet	
Guns :	1—4 inch, 1—20 mm. Oerlikon, 3 Vickers GO M.G.	
Tubes :	6—21 inch (bow), 12 torpedoes carried.	
Machinery :	Diesels. B.H.P. : 1,900 = 14½ kts. (max.) (surface). Electric motors, H.P. : 1,300 = 9 kts. (max.) (submerged)	
Oil fuel :	87 tons (normal stowage)	
Complement :	44	

Notes.—All purchased from Great Britain in 1943. Designed for offensive operations in confined waters. Names on conning tower

Name	Builders	Laid down	Launched	Completed
Narval	Cammell Laird	1 Oct., 1943	17 Nov., 1944	18 Feb., 1945
Nautilo		5 Apr., 1944	14 Mar., 1945	14 Jun., 1945
Neptuno		13 Aug., 1943	2 Oct., 1944	21 Dec., 1944

Patrol Vessels (Patrulhas).

3 New Construction.

Notes.—These three patrol vessels (PC) of U.S. design are building in the United States under the Mutual Defense Assistance Program



S. TOMÉ.

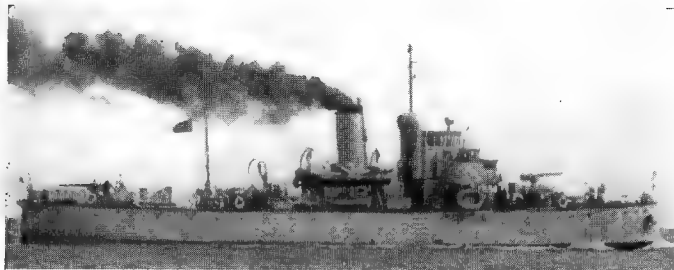
1953, courtesy Lieut.-Com. C. A. T. da Silva, P.N

P 581 FLORES (ex-PC 812)	P 583 S. TIAGO (ex-PC 1257)
P 582 MADEIRA (ex-PC 811)	P 585 S. TOMÉ (ex-PC 1256)
P 584 SAL (ex-PC 809)	P 586 S. VICENTE (ex-PC 1259)

Displacement : 280 tons (450 tons full load)  
Dimensions : 170 (w.l.), 173½ (o.a.) × 23 × 7½ feet  
Guns : 1—3 inch, 1—40 mm. AA., 5—20 mm. AA. (see notes)  
Machinery : 2 G.M. 2-stroke Diesels, 2 shafts. B.H.P. : 2,600 = 19 kts.

Notes.—Purchased from United States. Named after Portuguese Atlantic islands. For patrol and Air/sea rescue duties in Azores Madeira, and off Portuguese coast. The armament of these ships is being improved.

## Gunboats (Canhoneiras).



ZAIRE.

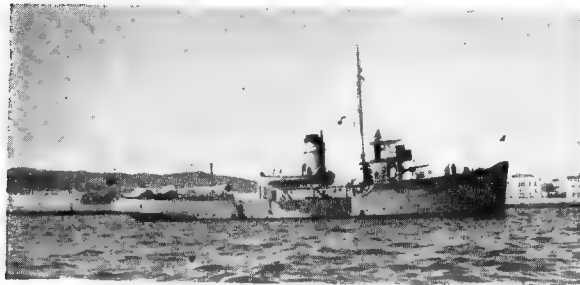
Added 1953, Commander Aguiar Basto, P.N.

### DIU

**ZAIRE (ex-Goa)**  
 Displacement: 397 tons standard (492 tons full load)  
 Dimensions: 147½ × 27½ × 7 feet  
 Guns: 2—3 inch, 40 cal. (Armstrong), 2—47 mm. in Diu, 2—3 inch, 2—20 mm. AA., 2 D.C.T. in Zaire  
 Machinery: Triple expansion, 2 shafts. I.H.P.: 700 = 13 kts.  
 Boilers: Yarrow  
 Coal: 85 tons  
 Radius: 3,200 miles at 9 kts.  
 Complement: 67

Notes.—Identification letters: Diu, none; Zaire, Z. The forward gun is now at the or-castle level (see photo, by courtesy of Lieut.-Com. R. Ferraz de Carvalho).

Name	Builders	Launched
Diu } Zaire }	Lisbon Dockyard	Oct., 1929 26 Feb., 1925



LAGOS.

1946, Lieut.-Com. Cruz Filipe, P.N.

### FARO

**LAGOS**  
 Displacement: 295 tons  
 Dimensions: 120 (pp.), 130½ (o.a.) × 22 × 10½ feet  
 Guns: 2—47 mm.  
 Machinery: Triple expansion. I.H.P.: 650 = 13 kts.  
 Boilers: 1 Yarrow  
 Oil fuel: 42 tons  
 Radius: 2,000 miles at 7.5 kts.  
 Complement: 55

Note.—Lagos has white band round funnel.

Name	Builders	Launched
Faro } Lagos }	Lisbon Dockyard	1927 1930

## Surveying Vessels (Navios Hidrográficos).



COM. ALMEIDA CARVALHO

1953 Commander Botelho de Souza, P.N.



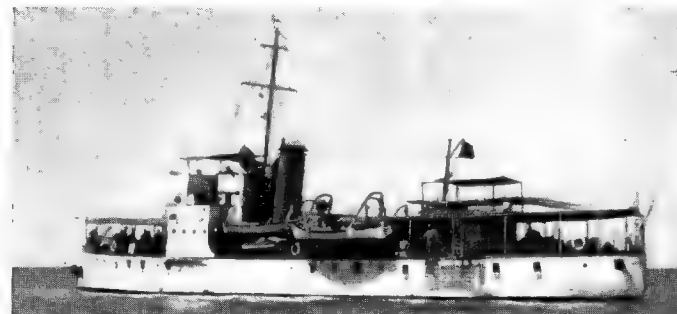
ALMIRANTE LACERDA.

1948, Commander Luis de Noronha e Andrade, P.N.

**ALMIRANTE LACERDA (ex-Caraquet)**  
**COMANDANTE ALMEIDA CARVALHO (ex-Fort York, ex-Mingan)**

Displacement: 672 tons  
 Dimensions: 171½ (pp), 180 (o.a.) × 28½ × 9½ (max.) feet  
 Guns: 1—3 inch, 2—20 mm. AA.  
 Machinery: Triple expansion, 2 shafts. I.H.P.: 2,400 = 16 kts.  
 Boilers: 2, of 3-drum small-tube type  
 Oil fuel: 160 tons

Notes.—Former British fleet minesweepers. Built in Canada, launched 2 June and 24 Aug. 1941, and purchased from Great Britain in 1946 and 1950, respectively. Comandante Almeida Carvalho has a white band round funnel.



MANDOVÍ

1953, Lieut.-Commander Lopes de Mendonça, P.N.

Displacement: 397 tons  
 Dimensions: 147½ × 27½ × 7 feet  
 Guns: 4—47 mm.  
 Machinery: Triple expansion, 2 shafts. I.H.P.: 700 = 13 kts.  
 Boilers: 2 cylindrical  
 Coal: 85 tons

Notes.—Built at Lisbon. Launched in 1917. Ibo removed from the effective list.

## Surveying Vessels—continued.



CARVALHO ARAUJO (ex-Jonquil)

1952, Commander Manuel Affonso Dias, P.N.

Displacement: 900 tons standard (1,190 tons ull load)  
 Dimensions: 250 (p.p.), 262½ (o.a.) × 33 × 11 (mean), 11½ (max.) feet  
 Machinery: Triple expansion. I.H.P.: 2,242 = 17.25 kts.  
 Boilers: 2 cylindrical  
 Complement: 90

Notes.—Built by Chas. Connell & Co., Scotstoun, launched Mar 1915. Purchased from Great Britain 1923. Refitted 1928-30 for Colonial Service. Adapted as surveying vessel 1937, guns being removed and deck-house for cartographers added abaft mainmast.

## Minesweepers (Draga-minas).

### 4 New Construction.

Displacement: 655 tons (750 tons full load)  
 Dimensions: 165 (pp), 171 (o.a.) × 30 × 9½ feet  
 Machinery: Diesel. Speed: 15.5 kts.

Notes.—These minesweepers are building in U.S. under the M.D.A.P.



S. MIGUEL.

1953, Lieut.-Commander Vosgien Noronha, P.N.

**BALDAQUE DA SILVA (ex-Rusholm)** **S. MIGUEL (ex-P 1, ex-Brurey)**  
**FAIAL (ex-P 2, ex-Mangrove)** **SANTA MARIA (ex-P 4, ex-Whalsay)**  
**SALVADOR CORREIA (ex-Saltarelo)** **TERCEIRA (ex-P 3, ex-Hoyling)**

Displacement: 545 to 560 tons (770 to 800 tons full load)  
 Dimensions: 152 × 27½ × 15 feet  
 Guns: 1—3 inch, 2—20mm. AA., D.C. carried  
 Machinery: Triple expansion. I.H.P.: 850 = 12 kts.  
 Complement: 36

Notes.—Trawlers purchased from Great Britain in 1945 and 1947, and named after islands in the Azores. Salvador Correia, rated as a patrol vessel (Navio Patrulheiro), and Baldaque da Silva, Oceanographical Research Vessel (Navio oceanográfico), painted white with yellow funnel, are both in service in Portuguese West Africa (Angola).

Pendant No.	Name	Builders	Launched
M 401	Baldaque da Silva	Goole S. B. & Repair Co.	4 Feb. 1942
	Faial	Ferguson Bros., Ltd.	15 Feb. 1940
	Salvador Correia	Henry Robb, Ltd.	6 Aug. 1940
M 403	S. Miguel	Cook, Welton & Gemmel	1 June 1942
M 404	Santa Maria		4 Apr. 1942
M 402	Terceira		17 Aug. 1942



## PORTUGAL—Coastal Minesweepers, Motor Launches, etc.

### Coastal Minesweepers (*Draga-minas*).

8 U.S. AMS Type.



PONTA DELGADA.

1954, courtesy Lieut. Carvalho Andrade, P.N.

**ANGRA DO HEROISMO** (ex-U.S.S. AMS 62)  
**HORTA** (ex-U.S.S. AMS 61)

**LAJES**  
**PONTA DELGADA** (ex-U.S.S. Adjutant, AMS 60)

**SANTA CRUZ** (ex-AMS 92)  
**S. ROQUE**

**VELAS**  
**VILA DO PORTO** (ex-AMS 91)

Displacement : 375 tons  
Dimensions : 138 (p.p.), 144 (o.a.) × 27 × 8 feet  
Machinery : Diesel. Speed 14 kts.  
Complement : 39.

Notes.—*Ponta Delgada*, transferred from United States 7 Apr. 1953. Of wooden and non-magnetic construction. First of group of AMS 60 class motor minesweepers specially constructed for NATO nations. Four delivered 1953-54. Three more building in U.S.

Pendant Nos. : M 407 (*Angra do Heroismo*), M 406 (*Horta*), M 405 (*Ponta Delgada*), M 408 (*Santa Cruz*), M 408 (*Vila do Porto*).

### Lighthouse Tender (*Navio Balizador*).



ALMIRANTE SCHULTZ

1953, Lieut.-Com. Almeida Joglar, P.N.

Builders : Penhoët  
Launched : 1929

Displacement : 520 tons  
Dimensions : 131½ × 31 × 10½ feet  
Machinery : 2 sets Rateau Diesels. B.H.P. : 1,950 = 9 kts.  
Oil fuel : 21 tons  
Complement : 48

Note.—Now has upper bridge built in (see photo).

### Fishery Protection Launches.

(*Lanchas da Fiscalização da Pesca*).



BICUDA

1953, Lieut.-Com. Lopes Marques, P.N.

**AZEVIA**  
**BICUDA**

Displacement :  
Dimensions :  
Guns :  
Machinery :

**CORVINA**  
**DOURADA**

200 tons (250 tons full load)  
134½ (pp.), 139½ (o.a.) × 21½ × 7 (max.) feet  
2—20 mm. AA., 2 M.G.  
2 sets 7-cyl. 2-stroke Sulzer Diesels in all except first pair, which have 2 sets 10-cyl. 4-stroke M.A.N. Diesels. 2 shafts. B.H.P. : 2,400 = 17 kts.

Oil fuel : 25 tons  
Radius : 3,700 miles at 11 kts., 850 miles at full speed  
Complement : 25

Notes.—All launched 1941-42. These vessels are differentiated by initials of names painted on bows. *Fataça* wrecked and total loss, Jan 22, 1949.

### Rescue Motor Launches (*Lanchas de socorro*).



ALTAIR.

1949

**ALTAIR**  
**CANOPUS**

Displacement :  
Dimensions :  
Machinery :  
Complement :

**DENEB**  
**ESPIGA**

65 tons (82 tons full load)  
112 × 17½ × 4 feet  
2 Hall-Scott engines. B.H.P. : 1,120 = 21 kts.  
(sea speed, 18 kts.)  
15

**FORMALHAUT**

Notes.—Ex-Fairmile B type MLs. Purchased from Great Britain in 1946. Respective Pendant Nos. are L1, L3, L4, L5, L6. Employed as rescue launches. Only one like *Altair*, remaining launches being slightly different in dimensions and appearance.

### Training Ship (*Navio-Escola*).



1953, Lieut.-Commander Vosgien Noronha, P.N.

**SAGRES** (ex-Flores, ex-Max, ex-Rickmer Rickmers)

Built : Bremerhaven  
Launched : 1896

Displacement : 3,067 tons (3,176 tons full load)  
Dimensions : 263½ × 40½ × 19 feet  
Guns : 4—57 mm.  
Machinery : 2 Krupp Diesels. 2 shafts. B.H.P. : 700 = 8 kts.  
Complement : 181 + 196 personnel under training

Notes.—Captured German sailing vessel, re-rigged as a barque and adapted as a naval training ship, 1924-27; auxiliary motors fitted in 1931.

### River Gunboat (*Lancha-Canhoneira*).

TÊTE

Builders : Yarrow & Co., Ltd.  
Launched : 1918

Displacement : 100 tons  
Dimensions : 76½ × 20 × 2½ feet  
Guns : 2—47 mm., 2 M.G.  
Machinery : Stern-wheel propulsion. H.P. : 70 = 8 kt  
Boilers : 1 Yarrow

Notes.—Re-launched at Chinde in 1920. Employed on Zambesi River.

### Fleet Oiler (*Navio Petroleiro*).



Added 1952, Official.

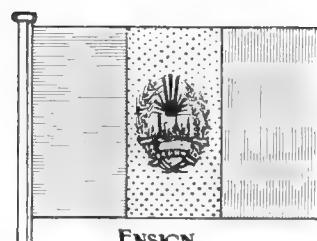
SAM BRAS

Built : Alfeite.  
Launched : 17 Mar., 1942.

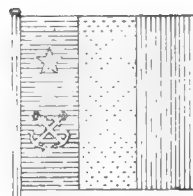
Measurement : 7,000 tons gross  
Capacity : 3,500 tons  
Dimensions : 336½ (pp.), 356½ (o.a.) × 50½ × 18 (max.) feet  
Guns : 1—3.9 inch AA.  
Machinery : B. & W. 2-stroke Diesel. B.H.P. : 11,500 = 12 kts.  
Oil fuel : 400 tons  
Complement : 51

## ROUMANIA

## Flags.

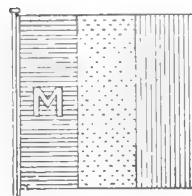


ENSIGN.



COMMANDER-IN-CHIEF

(When the C.-in-C. is a Vice-Admiral, this flag carries two stars and crossed anchors)



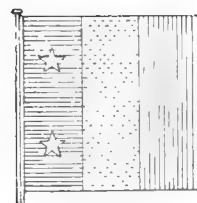
MINISTER OF WAR

Red

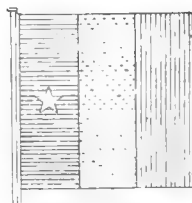
White

Blue

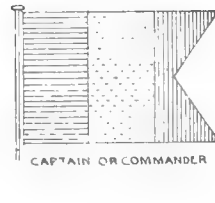
Yellow



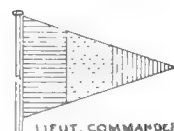
VICE ADMIRAL



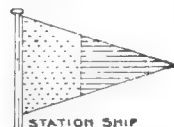
REAR ADMIRAL



CAPTAIN OR COMMANDER



LIEUT. COMMANDER

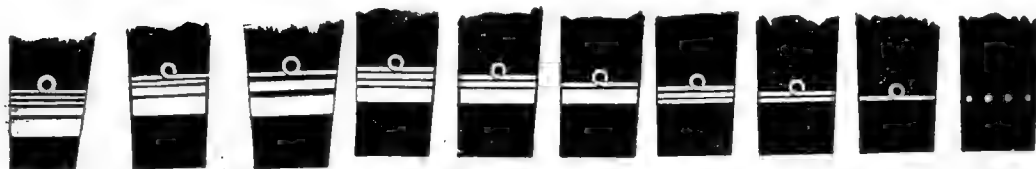


STATION SHIP

## Administration.

Minister of Defence : General Emil Bodnăras.

## Uniforms.



Amiral.

Vice-Amiral.

Contr'-Amiral.

Comandor.

Capitan-Comandor.

Locotenent-Comandor.

Capitan de Marină.

Locotenent de Marină.

Aspirant de Marină.

Eliv din Scoala de Marină.

Admiral.

Vice-Admiral.

Rear-Admiral.

Captain.

Commander.

Lt.-Com.

Senr.-Lieut.

Lieutenant.

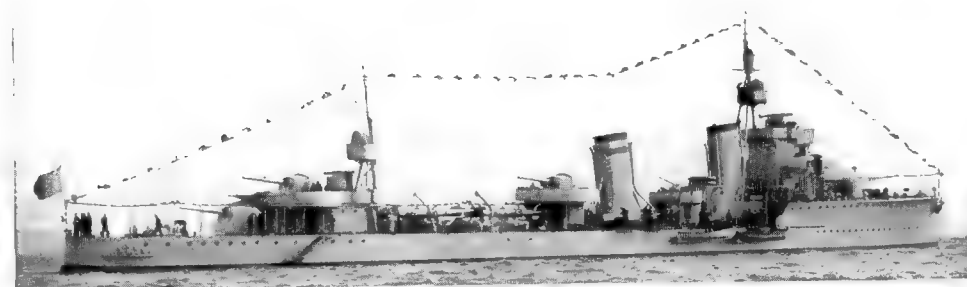
Sub.-Lieut.

Midshipman.

Stripes are gold (except Supply Officers, silver) with curl for all branches. Colour of silk between, above and below stripes : Executive ; Black, Engineers, violet ; Surgeons, dark red, almost purple in colour ; Constructors, light blue ; Apothecaries, green ; Musical Director, light grey.

Destroyers (*Distrugătoare*).

Black Sea Division (*Divizia de Mare*).



D 22.

D 21 (ex-Letuchi, ex-Regina Maria)

D 22 (ex-Likhoi, ex-Regele Ferdinand)

Displacement: 1,785 tons  
Dimensions: 334½ × 31½ × 11½ feet  
Guns (Bofors): 5—4.7 inch, 50 cal., 1—3 inch AA., 2—40 mm. AA., 3 M.G.  
Tubes: 6—21 inch (tripled)  
Mines: 50  
Machinery: Parsons geared turbines by Stab. Tecnico Triestino. 2 shafts. S.H.P.: 42,000 = 38 kts.  
Complement: 212

Notes.—Launched 2 Mar. 1929 and 2 Dec. 1928, respectively. Built at Naples to design of J. Thornycroft, & Co Ltd., Woolston Southampton. Returned by Russia by whom they were captured from Roumanian Navy in 1944. Pendant Nos. D 21 and D 22.



MĂRĂȘEȘTI (ex-Italian Sparviero)

MĂRĂȘEȘTI (ex-Italian Nibbio)

Displacement: 1,410 tons standard (1,723 tons full load)  
Dimensions: 309½ (pp.) × 31 × 11½ feet  
Guns: 4—4.7 inch, 2—37 mm. AA., 2 M.G. (see notes)  
Tubes: 4—17.7 inch in twin deck mountings  
Machinery: 2 Tosi turbines, 2 shafts. Designed S.H.P.: 45,000 = 34 kts.  
Boilers: 5 Thornycroft oil-burning  
Oil fuel: 260 tons = 1,700 miles at 15 kts., 380 miles at full speed  
Complement: 139

General Notes.—Built by Pattison, Naples, ordered for Roumanian Navy about 1913, and requisitioned by Italy in 1915. Launched 1919 and 1918, respectively. They were re-purchased by Roumania, 1920, and renamed after actions fought in 1917. Refitted and rearmed at Galatz and Naples, 1925-26. Equipped for minelaying. Pendant Nos. D 11 and D 12.

Gunnery Notes.—Reported to have been rearmed with German guns during the war.

ROUMANIA—Submarines, Minelayer, Patrol Vessels

Submarines.



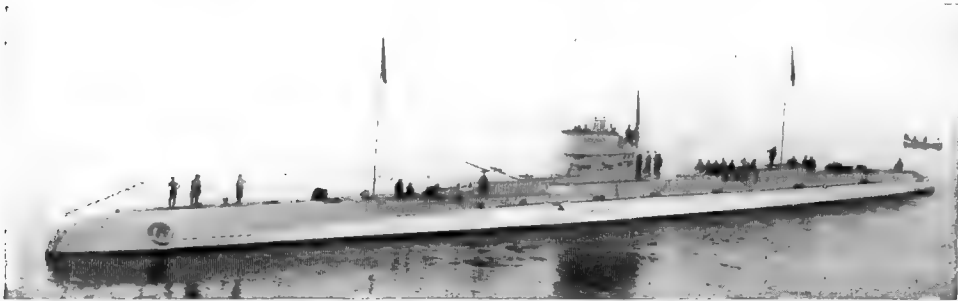
Added 1953, courtesy M. J. Meister.

MARSUINUL (S2)

Builders : Galatz Shipbuilding Yard  
Laid down : 1938  
Launched : 4 May 1941  
Completed : 1942  
Displacement : 620 tons (surface)  
Dimensions : 190½ × 18½ × 11½ feet  
Guns : 1—4.1 inch (105 mm.), 1—37 mm. AA.  
Tubes : 6—21 inch (4 bow, 2 stern), 12 torpedoes carried  
Machinery : Diesels. 2 shafts. B.H.P. : 1,840 -- 16 kts. Electric motors = 9 kts.

REQUINUL (S 1)

Builders : Galatz Shipbuilding Yard  
Laid down : 1938  
Launched : 22 May 1941  
Completed : 1942  
Displacement : 650 tons (surface)  
Dimensions : 223 × 19½ × 11½ feet  
Guns : 1—20 mm. AA.  
Tubes : 4—21 inch (bow)  
Mines : 40  
Machinery : Diesels. 2 shafts. B.H.P. : 1,840 -- 17 kts. Electric motors = 9 kts.



DELFINUL

Builders : Quarnaro  
Launched : 22 Jun., 1930  
Displacement : 640 tons (surface) 886 tons (submerged)  
Dimensions : 225 × 19½ × 12 feet  
Guns : 1—4 inch, 35 cal.  
Tubes : 8—21 inch  
Machinery : Sulzer Diesels and electric motors. Speed : 14 kts. (surface) 9 kts. (submerged)

Notes.—Completed 1931, but not taken over by Roumania until April, 1936. Received considerable damage during the war, and is now of doubtful efficiency.

Minelayer (Puitoare de Mine)



AMIRAL MURGESCU.

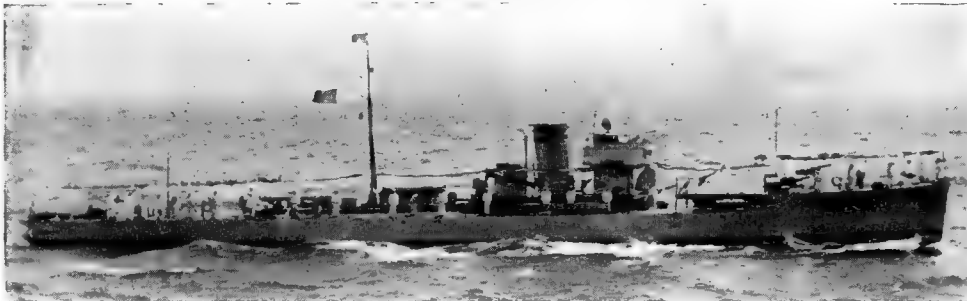
Added 1951, Dr. Erich Gröner

AMIRAL MURGESCU

Displacement : 812 tons standard  
Dimensions : 252½ (o.a.) × 29½ × 8½ (mean) feet  
Guns : 2—4 inch D.P., 2—37 mm. AA., 2 D.C.T.  
Mines : 135  
Machinery : 2 Krupp Diesels. B.H.P. : 2,100 = 16 kts.  
Radius : 3,000 miles at 12 kts.  
Complement : 78

Notes.—Amiral Murgescu, built by Galatz, launched 14 June, 1939. Existence of sister ship Cetatea Alba has been questioned.

Patrol Vessels. Ex-Torpedo Boats (Torpiloare).



SBORUL.

1934.

SBORUL (ex-T 81)

Displacement : 258 tons  
Dimensions : 189½ × 19 × 5 feet  
Guns : 2—11 pdr., 2 M.G. (Smeul)  
Torpedo tubes : 4—17.7 inch (Sborul)  
Machinery : Turbines. 2 Shafts. S.H.P. : 5,000 = 24 kts.  
Boilers : 2 Yarrow  
Fuel : 20 tons coal + 34 tons oil

SMEUL (ex-T 83)

Notes.—Ex-Austrian. Sborul means Flight. Smeul means Dragon. Appearance similar to Sborul, but two funnels (see Yugo-Slav T 5)

Pendant Nos.	Name	Builders	Launched
E 2	Sborul	Stab. Tecnico Triestino, Trieste	1913
E 1	Smeul	Ganz-Danubius Co., Porto Re, Fiume	1914

Gunboats (*Canoniere*).

SUBLOCOTENENT GHICULESCU.

Added 1951, *Erich Gröner*.**LOCOTENENT-COMANDOR STIHI EUGEN** (ex-French *Friponne*, Lorient D.Y., 1916)**SUBLOCOTENENT GHICULESCU** (ex-French *Mignonne*, Brest D.Y., 1917)

Displacement : 443 and 344 tons respectively  
 Dimensions :  $199\frac{1}{2} \times 22\frac{1}{2} \times 9\frac{1}{2}$  and  $7\frac{1}{2}$  feet respectively  
 Guns : 2—3.9 inch, 2 M.G.  
 Machinery : 2 sets of Sulzer Diesel motors. B.H.P. : 900 = 15 kts.  
 Oil fuel : 30 tons  
 Radius : 3,000 miles at 10 kts., 1,600 miles at 15 kts.  
 Complement : 50

Notes.—Builders and launch dates above. Purchased from French Navy, Jan. 9, 1920. Entered service Jan. 15, 1920. Are differentiated by coloured rings around crow's-nest. Names are those of naval officers killed in action, 1916-18. Pendant Nos. D 61, D 62.

## Motor Torpedo Boats.

Added 1951, *Dr. Erich Gröner*.**No. 10** (ex-S 151)**No. 11** (ex-S 152)**No. 12** (ex-S 153)**No. 13** (ex-S 154)

Displacement : 65 tons  
 Tubes : 2—19.7 inch  
 Machinery : 3 sets Mercedes-Benz. B.H.P. : 2,850 = 30 kts  
 Complement : 25

Note.—All ex-German craft. Reported to have been seized by the Russians.

## Patrol Boats

Notes.—There are some launches on the Danube and some patrol boats in the Black Sea. Reports mention three submarine chasers or patrol boats and two surveying vessels or patrol craft.

Submarine Depot Ship (*Navă Bază*).1947 *M. G. Oussarof***CONSTANTA**

Builders : Quarnaro Yard, Fiume  
 Laid down : 15 Aug., 1927  
 Launched : 8 Nov., 1928  
 Completed : 1931  
 Displacement : 1,329 tons  
 Dimensions :  $255\frac{1}{2} \times 37 \times 13\frac{1}{2}$  feet  
 Guns : 2—4 inch, 2—40 mm.  
 Machinery : 2 sets Diesels. B.H.P. : 1,000 = 13 kts  
 Radius : 12,000 miles

Notes.—Fitted with engineering and torpedo shops ; bakery ; torpedo loading room ; salvage, diving and submarine signalling apparatus.

Yachts (*Jachturi*).**LUCEAFARUL** (ex-Nahlin)

Builders : Clydebank  
 Launched : 1930  
 Displacement : 2,050 tons  
 Dimensions : 250 (w.l.), 296 (o.a.)  $\times 46 \times$  — feet  
 Machinery : 4 Brown-Curtis geared turbines. 2 shafts. S.H.P. : 4,000 = 17.5 kts.  
 Boilers : 2 Yarrow. Oil fuel.

Note.—Purchased in 1937.

**TAIFUN**

Builders : J. Samuel White & Co., Ltd., Cowes  
 Launched : 1938  
 Thames Measurement : 31 tons  
 Dimensions :  $54 \times 12\frac{1}{2} \times 3$  feet  
 Machinery : 2 petrol motors, 2 shafts

Note.—Of wooden construction.

Sail Training Ship (*Navă Școală*).**MIRCEA**

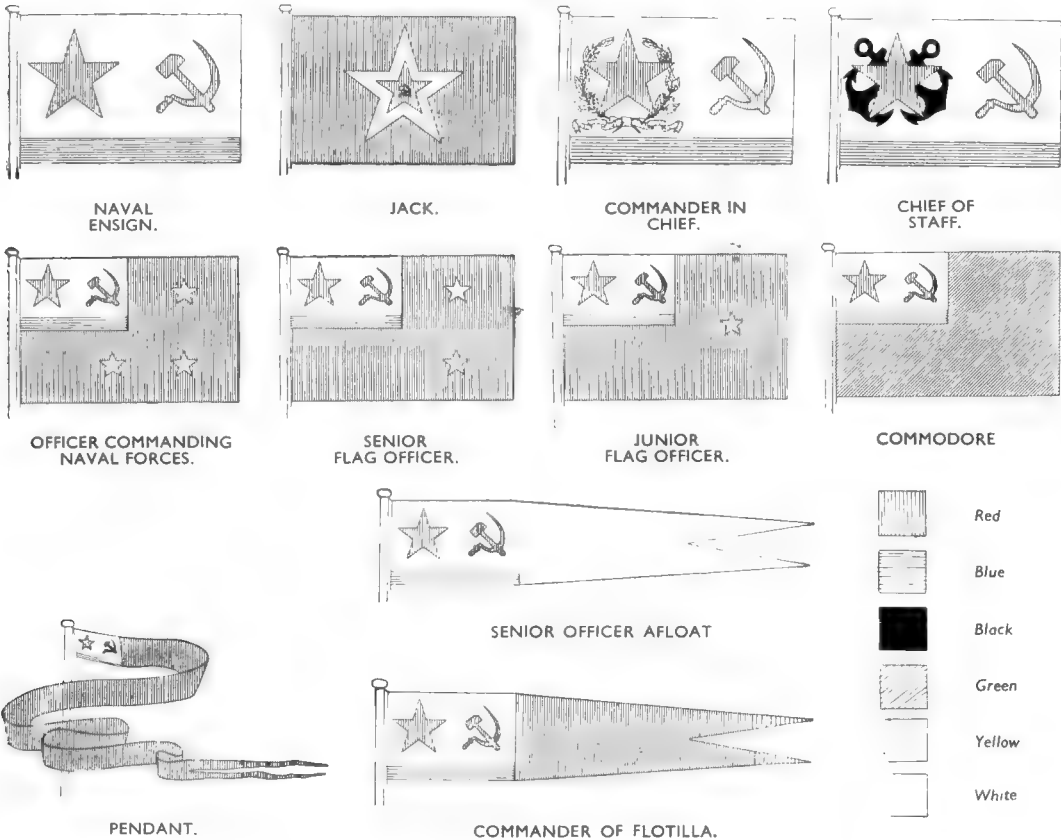
Builders : Blohm & Voss, Hamburg  
 Laid down : 30 April, 1938  
 Launched : 22 Sept., 1938  
 Displacement : 1,604 tons  
 Dimensions :  $239\frac{1}{2}$  (o.a.),  $267\frac{1}{2}$  (with bowsprit)  $\times 39\frac{1}{2} \times 16\frac{1}{2}$  feet  
 Sail area : 18,830 sq. ft.  
 Machinery : Auxiliary M.A.N. 6-cylinder Diesel. B.H.P. : 500 = 9.5 kts  
 Complement : 83 + 140 midshipmen for training

Note.—Delivered March 29, 1939.

RUSSIA (U.S.S.R.)

Note.—It is difficult to obtain accurate data of Russian warships, but particulars in the following pages have been revised in 1954 according to information available.

Flags.



Administration and Command.

On 26 Feb. 1946 the control of all the Soviet armed forces was unified under a single Defence Ministry, but this was divided and a War Ministry and a new independent Navy Ministry was created 25 Feb. 1950. On 15 March 1953 a single Ministry of Defence was reconstituted.

In 1953, Vice-Admiral N. G. Kuznetsov was again promoted to Admiral of the Fleet. He was disgraced to Rear-Admiral some years ago after suspicion of complicity with the West. Since the death of Stalin, however, he has again risen in favour. As far as is known the only other Admiral of the Fleet in the Red Navy is Admiral Isakov.

Navy Estimates.

1950-51: 15,400,000,000 roubles. 1952-53: 20,000,000,000 roubles.

Uniforms.



Admiral Flota.	Admiral.	Vitse Admiral.	Kontr Admiral.	Kapitan I Ranga.	Kapitan II Ranga.	Kapitan III Ranga.	Kapitan Leitenant.	Starshi Leitenant.	Leitenant.	Mladshi Leitenant.
Admiral of the Fleet.	Admiral.	Vice- Admiral.	Rear- Admiral.	Captain.	Captain (junior).	Commander.	Lieut.- Commander.	Lieutenant.	Sub-Lieut.	Acting Sub-Lieut.

Ranks are also distinguished by insignia on shoulder straps as follows:—

*Executive Officers* have golden shoulder straps with silver stars and black stripes.  
*Engineers* similar, but with narrow stripe of red around the shoulder strap.  
*Constructors* have silver shoulder straps with golden stars and red stripes.  
*Surgeons* have silver shoulder straps with golden stars and black stripes.  
*Civilian Officers* have narrower shoulder straps of silver with golden stars and black stripes.

Personnel.

Total 750,000 officers and men, including river flotillas, training establishments, coast-artillery and marines ; and naval air force.

Naming of Warships.

<i>Battleships</i> after countries, famous battles and victories	<i>Minesweepers</i> after weapons and ship equipment
<i>Cruisers</i> after political leaders and famous admirals	<i>Minelayers</i> and <i>Netlayers</i> after rivers and lakes
<i>Flotilla leaders</i> after cities and towns	<i>Gunboats</i> after tribes, etc.
<i>Destroyers</i> after adjectives	<i>Surveying vessels</i> after astronomical terms
<i>Torpedo boats</i> after birds and winds	<i>Depot ships</i> after towns and rivers
<i>Submarines</i> after fishes and animals	<i>Icebreakers</i> after political leaders, Arctic explorers

Colour of Warships.

<i>Naval vessels</i> : Light grey all over.	<i>Surveying vessels</i> : Black hulls with red waterlines,
<i>Auxiliaries</i> : Painted somewhat darker grey.	yellow funnels with black tops.

Mercantile Marine

Lloyd's Register appendix, 1954 : 1,052 vessels of 2,298,364 tons gross.





NOVOROSIISK.



KIROV Class, 1st group (now no catapult)



MARTY.



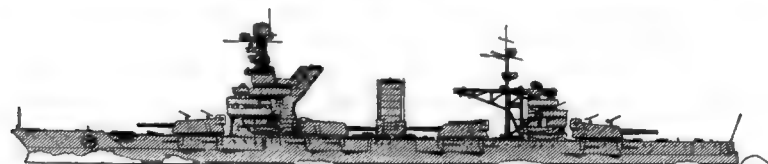
SEVASTOPOL.



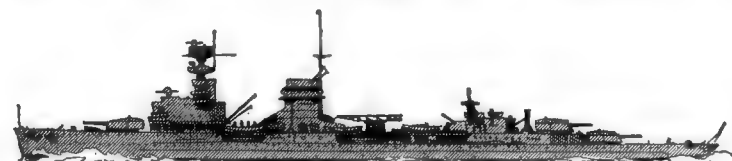
KIROV Class, 2nd group (now no catapult)



Ex-HARUTSUKI.



OKTYABRSKAYA REVOLUTSIA.  
(Now no aircraft crane. Has AA. on forecstle and on lower quarter deck)



ADMIRAL MAKAROV (now no catapult)



PROVORNI.



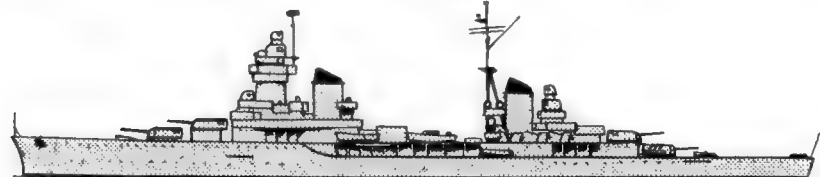
SVERDLOV Class. \*



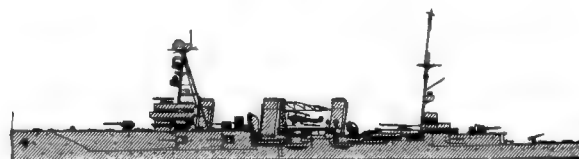
KRASNI KAVKAZ.



PROCHNI.



TCHAPAYEV Class. \*  
(Four twin AA. at break of forecstle. Three twin AA. at after control)



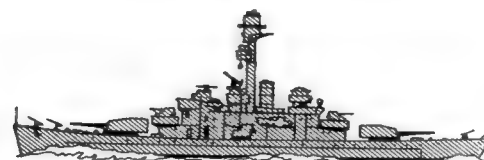
KRASNI KRIM.  
(Foremast should be taller.)



GROMKI Class.



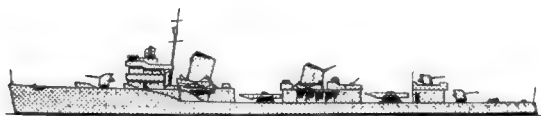
STALINGRAD. \*



VIBORG.



BEZUPRECHNI Type.



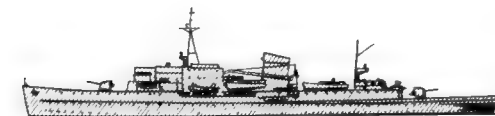
OPITNI.



Ex-KAYA, Ex-KIRI\*



Ex-KIJI\*.



Ex-ADOLF LUDERITZ.



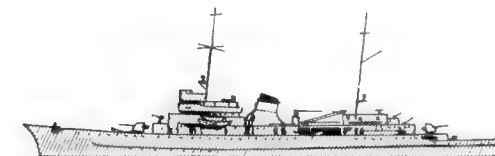
PYLKI, ZHORKI.



Ex-HATSUZAKURA, Ex-SHII\*



Ex-SHUMUSHU\*.



ANGARA.



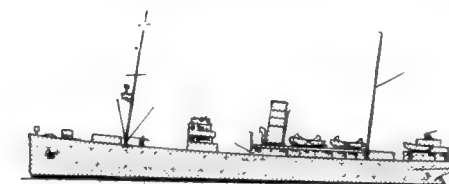
LENINGRAD Class.



Ex-IKINO, Ex-KOZU\*.



YASTREB



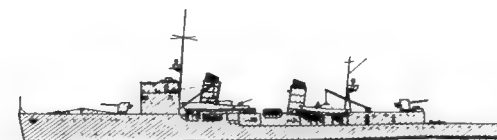
SMOLNY.\*



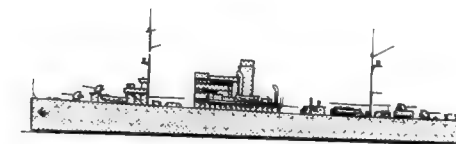
Ex-HIBIKI.\*



Ex-Nos. 34-196\*.



Ex-F 7.



IRTYSH.



NEZAMOSHNIK Class.



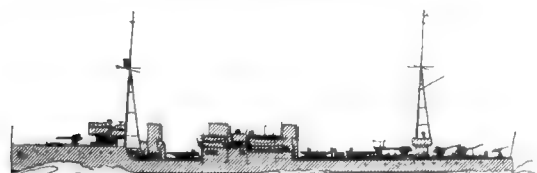
Ex-Nos. 71-227\*.



VASILI GROMOV.



Ex-No. 13\*.



URITSKI Class.



Ex-FORTUNALE Class.



Ex-Nos. 20, 23\*.

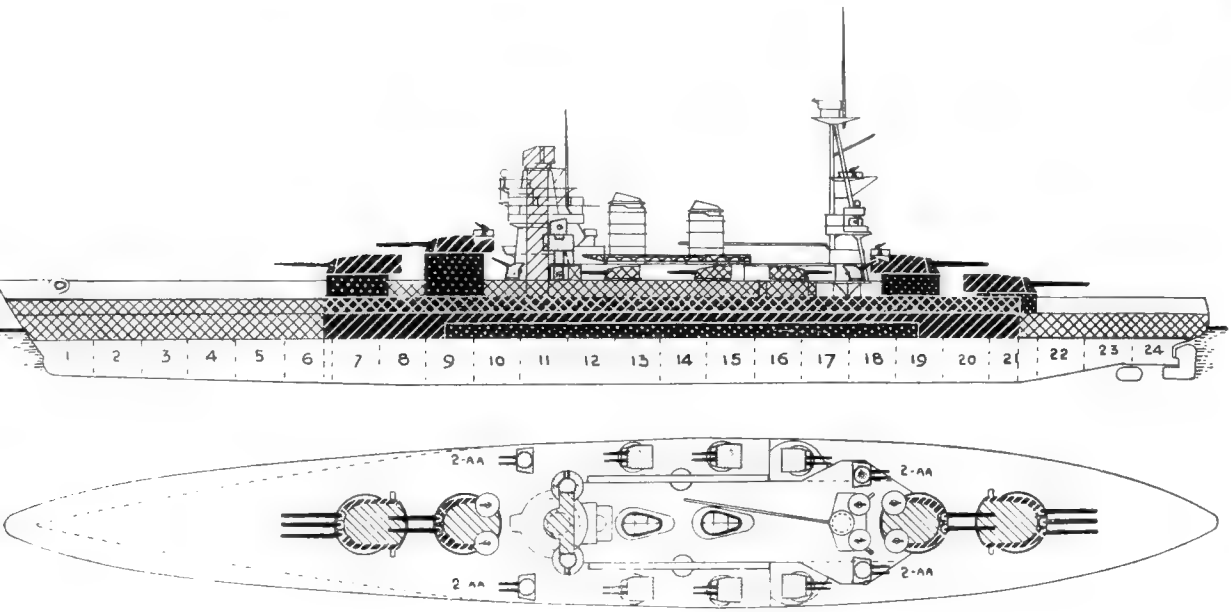


KRASNOYE ZNAMBA.\*

Battleship.

NOVOROSSIISK (ex-Z11, ex-Giulio Cesare)

Builders:	Ansaldo
Laid down:	23 June 1910
Launched:	15 Oct. 1911
Completed:	29 Nov. 1913
Displacement:	23,622 tons standard (29,032 tons full load)
Dimensions:	Length: 597 (w.l.), 611½ (o.a.) feet. Beam: 92 feet. Draught: 30 feet (mean)
Guns:	10—12 inch, 52 cal., 12—4.7 inch, 8—3.9 inch AA., 4—37 mm. AA., 9 M.G.
Armour:	9½"—8" belt (amidships), 5" belt (ends), 9½" barbattes, 11" turrets to these, 11" C.T. (fore)
Machinery:	Belluzzo geared turbines. 2 shafts. S.H.P.: 75,000 = 27 kts. (now about 23 kts.)
Boilers:	8, of 3-drum type (working pressure reported to be 500 lb. per sq. inch)
Oil fuel:	2,506 tons
Radius:	4,500 miles at 10 kts.; 1,700 miles at 24 kts
Complement:	1,198



General Notes.—This ship was assigned to the Soviet Navy under the Italian Peace Treaty. Delivered to Russia 3 Feb. 1949. Recommissioned after having been rearmed with Russian guns. In Black Sea.

Gunnery Note.—Italian 12.6-inch guns, 43.8 calibres in length first mounted in this ship were replaced by Russian 12-inch, 52 cal. guns.

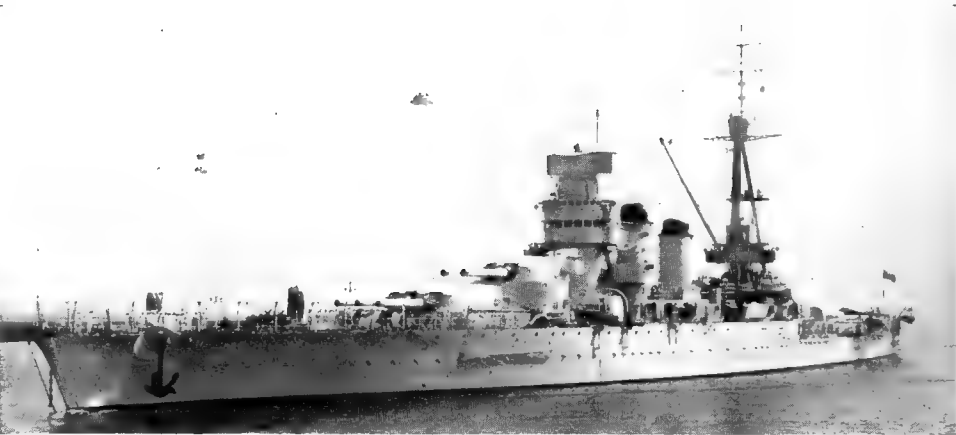
Armour Notes.—Thicknesses of armour given above are those of original design. Protection was subsequently improved over magazines, propelling machinery and boiler rooms.

Reconstruction Note.—Rebuilt by Cant. Nav. del Tirreno 1933–37 at a cost of Lir. 150,000,000



NOVOROSSIISK.

Added 1949.



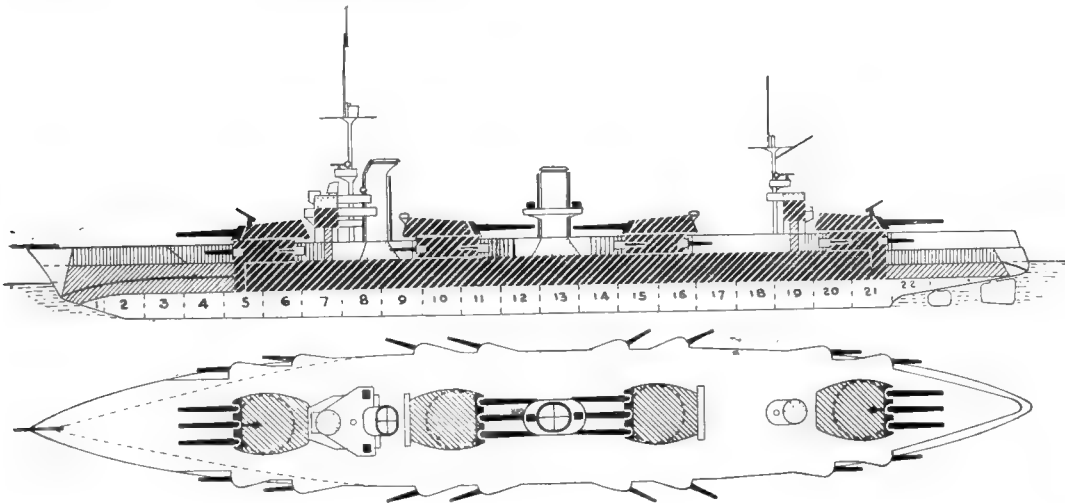
NOVOROSSIISK.

1938, Grand Studio.

Battleships—continued.

OKTYABRSKAYA REVOLUTSIA (ex-Gangut) SEVASTOPOL (ex-Parizhskaya Kommuna, ex-Sevastopol)

Displacement : 23,606 and 23,256 tons standard, respectively (over 26,000 tons full load)  
Dimensions : Length : 590½ (w.l.), 619 (o.a.) feet. Beam : 87 feet. Draught : 27½ feet (mean)  
Guns : (Oktyabrskaya Revolutsia) : 12—12 inch, 52 cal., 12—4·7 inch, 50 cal., 8—3 inch AA., 12—37 mm. AA.  
(Sevastopol) : 12—12 inch, 52 cal., 16—4·7 inch, 50 cal., 8—3 inch AA., 16—37 mm. AA.  
Tubes : 4—18 inch, submerged (Sevastopol)  
Armour (Krupp) : 8½" belt (amidships), 5"-2" belt (ends), 3"-4" internal belt (see Notes), 3" deck, 12"-10" turrets, 8" turret bases, 6" battery, 10" C.T.  
Machinery : Parsons turbines, direct drive. 4 shafts. S.H.P. : 50,000 = 23 kts. (now less, see Notes)  
Boilers : 25 Yarrow (22 of 3-drum type in Sevastopol, installed 1933)  
Coal : 1,000 tons normal, 1,700 tons max., + 1,170 tons oil  
Radius : 4,000 miles at 16 kts. 900 miles at 23 kts  
Complement : 1,087 (peace), 1,275 (war)



General Notes.—The late Gen. Vittorio Cuniberti prepared the original designs for this type. The Ministry of Marine afterwards altered the plans to include Russian ideas of armouring, ice-breaking bows and other special features. Further, to obtain a higher speed, hull design was relatively lighter than in contemporary battleships of other fleets. Sevastopol refitted and reboilered in 1936-39. Oktyabrskaya Revolutsia refitted 1931-34. Sevastopol renamed again in 1942. Third ship, Petropavlovsk (ex-Marat), was badly damaged forward by enemy air attack in 1941 at Kronstadt, where she still remains in commission but without fore-castle. Fourth ship, Poltava, scrapped 1923. Originally named after famous battles and victories of Russian armed forces.

Gunnery Notes.—The port plate above each gun is in the form of a hinged flap, allowing each 12-inch gun to elevate to 30-40 degrees max. Arcs of fire: End triple 12-inch barbettes, 310 degrees; central barbettes, 130 degrees each beam; aft group of 4-4·7 inch, 90 degrees; other 4·7 inch, 85 degrees. Anti-aircraft armament extended in recent years. Now have several twin and quadruple 37 mm. AA. mountings on the turrets and bridges.

Armour Notes.—Belt is about 15 feet wide, 5 feet of it below water, uniform thickness. There is a secondary 3"-4" internal belt 11 feet inboard above protective deck, extending between the end barbettes. The space between main belt and internal belts is divided up into w.t. compartments.

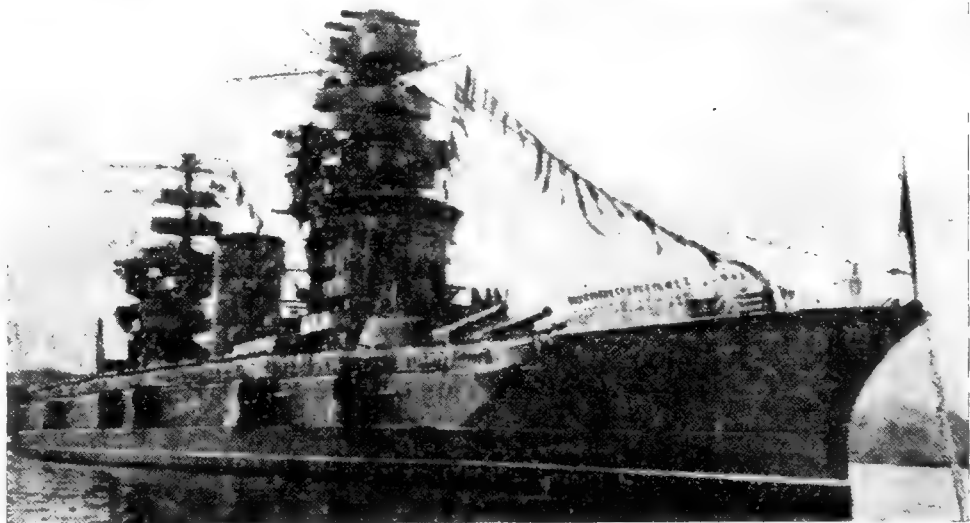
Engineering Notes.—Developed 57,000 S.H.P. in full first power trials, equal to a speed of 23·4 kts. Best recent speeds : Oktyabrskaya Revolutsia, 16 kts. Sevastopol, 20 kts.

Name	Builder	Machinery	Laid down	Launched	Completed
Oktyabrskaya Revolutsia	Galernii	Franco-Rus. Works	June 1909	7 Oct. 1911	Jan. 1914
Sevastopol	Baltic Works	Baltic Works	June 1909	29 June 1911	Jan. 1915



SEVASTOPOL.

Added 1953, courtesy M. J. Meister



SEVASTOPOL.

Added 1953, courtesy M. J. Meister.



OKTYABRSKAYA REVOLUTSIA.

## 12 + 6 "Sverdlov" Class.



Added 1954, Wright &amp; Logan.



SVERDLOV

ADMIRAL NACHIMOV  
ADMIRAL USHAKOV

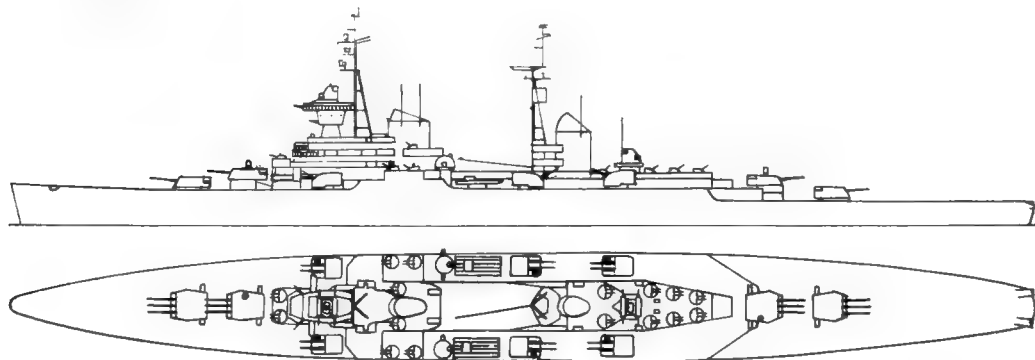
ALEXANDER NEVSKI  
DZERZHINSKI

ORDZHONIKIDZE  
SVERDLOV  
TCHERBAKOV

VARYAG  
VOIKOV  
ZHDANOV

1953 photo, Wright &amp; Logan.

Displacement : 12,800 tons *nominal* (17,000 tons *full load*)  
 Dimensions : Length : 656 (pp.), 689 (o.a.) feet. Beam : 65½ feet. Draught : 16 (mean), 24½ (max.) feet.  
 Guns : 12—6 inch in four triple turrets (calibre actually 150 mm. or slightly less than 6 inch, possibly German 5.9 inch), 12—3.5 inch in six twin mountings (approximate calibre, actually 88 mm. or slightly less than 3.5 inch, possibly German 3.4 inch), 32—37 mm. AA.  
 Tubes : 10—21 inch (quintuple mountings)  
 Mines : 140 (Fitted for minelaying. Mine stowage on second deck)  
 Armour : Continuous deep and thick belt all round ship from bow to stern.  
 Machinery : 2 shafts. S.H.P. : 130,000 = 34.5 kts.  
 Boilers : 6  
 Complement : 1,050



Notes.—Twelve of the eighteen ships have been launched since 1950. Ten operational by July 1954. Six under construction.

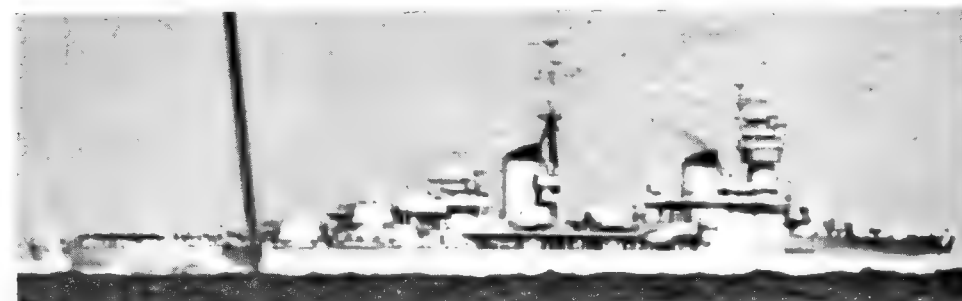
## New Construction.

## KAMTCHATKA

Displacement : 5,000 tons

Notes.—Two light cruisers are reported to be under construction in Far East, *Kamtchatka* at Komsomolsk. May be flotilla leader or fast minelayer type.

## 4 "Tchapayev" Class.



TCHAPAYEV

Added 1953.



ZHELESNYAKOV.

Added 1952.

## FRUNSE

## TCHAPAYEV

## TCHKALOV

## ZHELESNYAKOV

Displacement : 11,500 tons *standard* (13,000 tons *full load*)  
 Dimensions : Length : 656 feet. Beam : 64½ feet. Draught : 21 feet  
 Guns : 12—6 inch in four triple turrets, 8—4 inch AA., 28—37 mm. AA. (twin mounts)  
 Mines : 100  
 Machinery : Geared turbines. S.H.P. : 113,000 = 35 kts.  
 Complement : 834

General Notes.—*Tchapayev*, *Tchkalov*, laid down before the war, and *Zhelesnyakov* launched approximately 1942-44. All work on these ships was stopped during the war, but resumed in 1946-47. *Tchapayev*, *Tchkalov*, and *Zhelesnyakov* are now in commission. Catapults removed from all ships of this type. *Tchkalov* in Baltic, other two transferred to White Sea, July, 1951, for Northern Fleet. *Frunse*, built by Marti Yard, Nikolaiev, laid down 1939, launched 1941, completed 1950. Another ship of this class is reported to be named *Kuibyshev*.

Gunnery Notes.—Turret guns are in separate sleeves allowing independent elevation. Elevation at least 50 degrees.

Appearance Notes.—*Tchapayev*, *Tchkalov* and *Zhelesnyakov* have heavy director on control tower, pole foremast, tripod mainmast forward of after funnel and raked square stern. Vertical funnels. All this class have higher freeboard and longer funnels than ships of the "Kirov" class. Resemble "Sverdlov" class in several respects, but forecastle deck breaks abreast the forefunnel instead of at quarter deck.



RUSSIA—Cruisers

6 “ Kirov ” and “ Improved Kirov ” Types.

1st Type

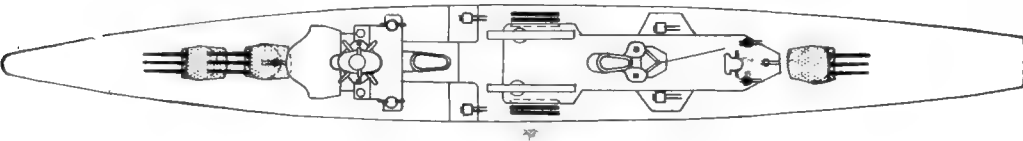
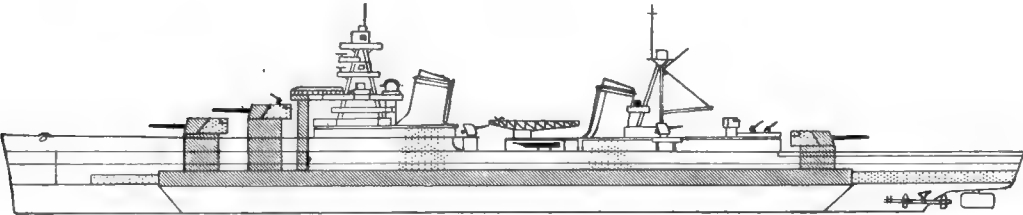
KIROV

MOLOTOV

2nd Type

KAGANOVITCH    MAKSIM GORKI  
KALININ            VOROSHILOV

Displacement: 8,800 tons (9,500 tons full load)  
Dimensions : Length : 613½ (pp.), 626½ (o.a.) feet. Beam : 59 feet. Draught : 17 (mean), 20 (max.) feet  
Guns : 9—7.1 inch, 8—4 inch AA., 10—37 mm. AA., 6—13 mm. AA. M.G.  
Tubes : 6—21 inch (in triple deck mountings)  
Mines : 60  
Armour : 2—3” side, 2” deck, 3—4” gunhouses, 4 C.T.  
Machinery : Geared turbines with Diesels for cruising speeds. 4 shafts. S.H.P. : 110,000 = 35 kts. (actually less)  
Boilers : 6 Yarrow or Normand  
Oil fuel : 1,280 tons  
Complement 734

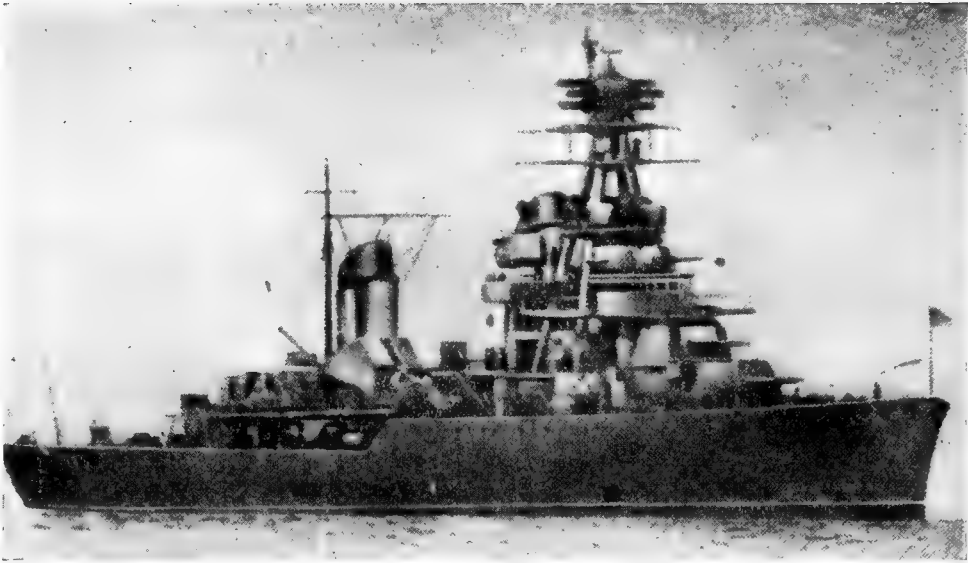


Note to Plan.—Now no catapult, which has been replaced by additional anti-aircraft weapons.

General Notes.—Design and technical direction of construction said to have been furnished by Ansaldo. Two more ships, named Orzhonikidze and Kaganovich, under construction at Nikolaiev, were wrecked by high explosives before the enemy occupied that port in August, 1941. At least one cruiser of this type (Maksim Gorki) was badly damaged in the Baltic in August, 1941. Kaganovich and Kalinin are at Vladivostok. Kirov has completed a refit lasting almost three years and now has general appearance of the “ Tchapyayev ” Class, although retaining the quadruped foremast and large optical directors.

Gunnery Notes.—Triple guns are mounted in one sleeve and are thus incapable of separate elevation. Maximum observed elevation approximately 40 degrees.

Appearance Notes.—First Group : Kirov and Molotov have very long forecastle, heavy tripod mast stepped abaft forebridge, light tripod stepped abaft second funnel, three turrets very large funnels. Second Group : Remaining vessels have high director tower on forebridge, light tripod foremast abaft bridges, heavy tripod, mainmast stepped abaft second funnel, three turrets, smaller funnels, and generally lighter in appearance than ships of “ Kirov ” group.



KIROV.

Addea 1953, courtesy M. J. Meister



MAKSIM GORKI.

1949.

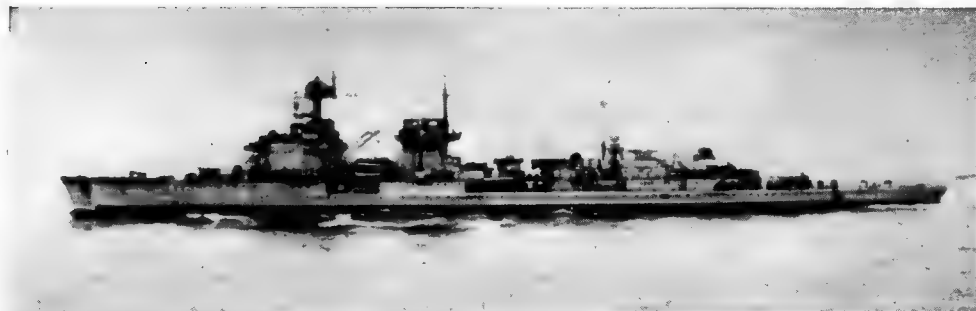


KIROV.

1949

Name	Builder	Machinery	Laid down	Launched	Completed
Kaganovitch	Komsomolsk Shipyards	Tosi, Taranto	1939	1945	1946
Kalinin			1939	1945	1947
Kirov	Putilov D.Y.		1934	1 Dec. 1936	26 Sept. 1938
Maksim Gorki	Marti Yard, Nikolaiev		1935	Dec. 1937	1940
Molotov			1935	23 Feb. 1939	1944
Voroshilov			1936	1940	1945

**Light Cruiser.**  
I Ex-German Type.

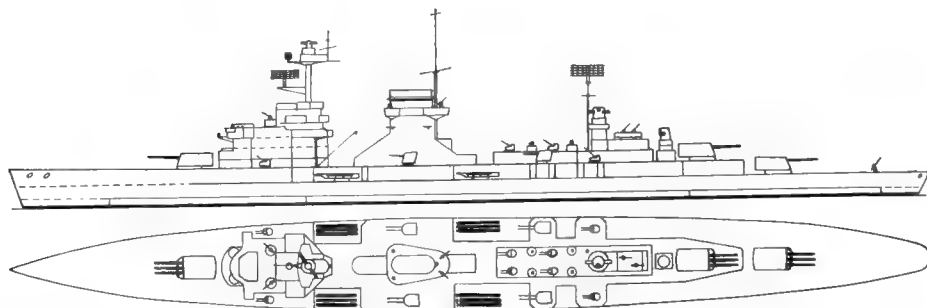


1944.

**ADMIRAL MAKAROV** (ex-Nürnberg)

Builders: Deutsche Werke, Kiel  
Laid down: Early 1934  
Launched: 8 Dec. 1934  
Completed: Nov. 1935

Displacement: 6,700 tons designed, 7,600 tons standard (9,110 tons full load)  
Dimensions: Length: 557½ (p.p.), 603 (o.a.) feet. Beam: 54 feet. Draught: 14½ (mean), 18½ (max.) feet  
Guns: 9—5.9 inch, 50 cal., 8—3.5 inch AA., 4—40 mm. AA., 4—37 mm. AA., 29—20 mm. AA.  
Tubes: 12—21 inch, above water (tripled)  
Armour: 3"—4" vert. side, 2" gunhouses, 3" C.T.  
Machinery: Geared turbines. 3 shafts. S.H.P.: 60,000 = 31.5 kts. + Diesels of 12,000 B.H.P. for cruising  
Boilers: 6 Marine type  
Complement: 656



**General Notes.**—Former German light cruiser. First commissioned at beginning of Nov. 1935. Taken over by Soviet Navy in 1946. Now rearmed. Aircraft formerly carried is believed to have been removed.

**Historical Notes.**—Named after the admiral commanding the Russian Far Eastern Fleet who lost his life when his flagship was mined outside Port Arthur in 1904.

**Light Cruiser.**  
I Ex-Italian Type.

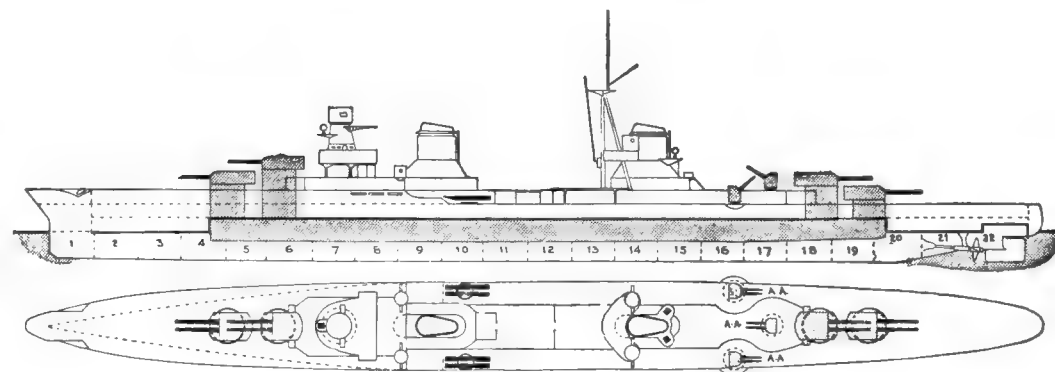


1943, Official.

**STALINGRAD** (ex-Z 15, ex-Emanuele Filiberto Duca D'Aosta)

Builders: Odero-Terni-Orlando  
Laid down: Jan. 1932  
Launched: 22 Apr. 1934  
Completed: July 1935

Displacement: 7,283 tons as designed; actual figure is 7,527 tons standard (10,541 tons full load)  
Dimensions: Length: 592 (w.l.), 610½ (o.a.) feet. Beam: 57½ feet. Draught: 16½ feet (mean)  
Guns: 8—6 inch, 53 cal., 6—3.9 inch, 47 cal. AA., 8—37 mm. AA., 12—20 mm. AA., 2 M.G., 2 D.C.T.  
Tubes: 6—21 inch (tripled)  
Armour: 1½"—4" vert. side, 1½" deck, 4" turrets, 3" barbettes, 4" C.T.  
Machinery: Parsons geared turbines. 2 shafts. S.H.P.: 110,000 = 36.5 kts.  
Boilers: 6, of 3-drum type  
Oil fuel: 1,731 tons  
Complement: 551

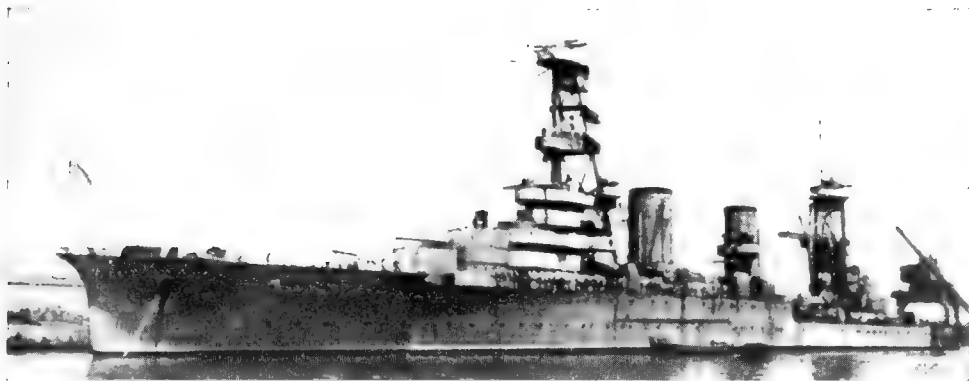


**Note to Plan.**—Torpedo tubes are tripled, not paired, as shown.

**General Notes.**—Former Italian light cruiser. Equipped for minelaying. This ship was assigned to the Soviet Navy under the Italian Peace Treaty. Delivered to Russia 27 Feb. 1949. Recommissioned in Black Sea.

RUSSIA—Cruisers and Coast Defence Ship

Cruisers.



KRASNI KAVKAZ

Added 1953, courtesy M. J. Meister.

KRASNI KAVKAZ (ex-Admiral Lazarev)

Builders :	Nikolaiev
Laid down :	1914
Launched :	June 1916
Completed :	1932
Displacement :	8,030 tons
Dimensions :	Length : 530 (pp.), 545 (o.a.) feet. Beam : 50½ feet. Draught : 20½ feet
Guns :	4—7.1 inch, 12—4 inch AA., 2—3 inch AA., 4—45 mm. AA., 8—37 mm. AA., 14 M.G.
Tubes :	6—21 inch (tripled)
Mines :	100
Aircraft :	1, with catapult
Armour :	2"—3" side, 1" deck, 3" gunhouses, 3" C.T.
Machinery :	Brown-Boveri turbines. 2 shafts. H.P. : 55,000 = 25 kts.
Boilers :	13 Yarrow
Fuel :	Coal : 540 tons. Oil : 690 tons
Radius :	3,700 miles at 14 kts.
Complement :	850

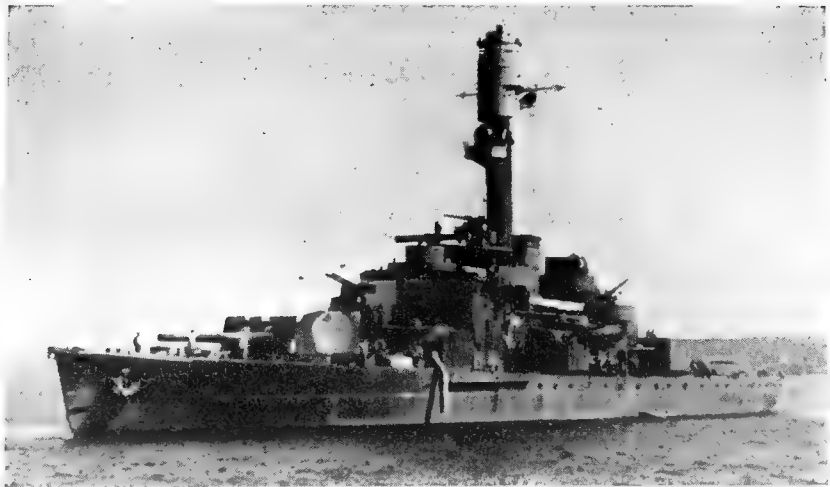
General Notes.—The construction of this ship was held up for many years. She was reported to be fitted for minelaying.

KRASNI KRIM (ex-Profintern, ex-Svietlana)

Built :	Reval
Laid down :	1913
Launched :	June 1915
Completed :	Dec. 1924
Displacement :	6,934 tons (8,500 tons full load)
Dimensions :	507½ feet. Beam : 50½ feet. Draught : 18½ feet
Guns :	11—5.1 inch, 55 cal., 4—4 inch AA., 4—45 mm. AA., 10—37 mm. AA.
Tubes :	6—21 inch (in triple mounts)
Mines :	100
Armour :	2" side at w.l. amidships, 1" deck, 3" gun shields, 3" C.T.
Machinery :	A.E.G. turbines. 2 shafts. S.H.P. : 50,000 = 29.5 kts. (actual best speed is under 25 kts.)
Boilers :	13 Yarrow
Fuel :	Coal : 540 tons. Oil : 690 tons
Radius :	470 miles at full speed, 3,700 at 14 kts.
Complement :	684

General Notes.—Built under the 1912 Naval Programme. Construction was held up for many years. Germans claimed to have sunk either this ship or Krasni Kavkaz, but confirmation of the report is lacking. Old cruiser Komintern, 6,338 tons, still exists as a stationary school ship.

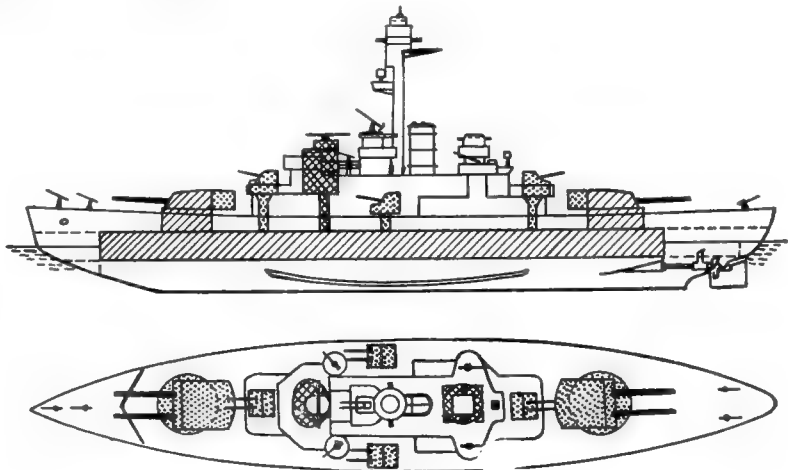
Coast Defence Ship.



1944.

VIBORG (ex-Väinämöinen)

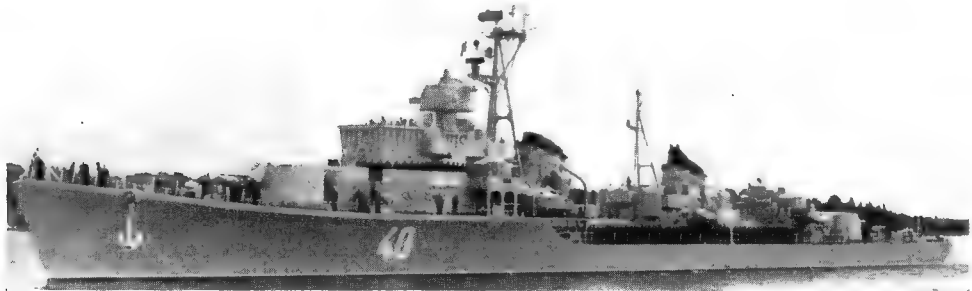
Builders :	A.-B. Crichton-Vulkan, Turkü (Åbo)
Laid down :	Aug. 1929
Launched :	28 Dec. 1930
Completed :	1932
Displacement :	3,900 tons
Dimensions :	Length : 305 feet. Beam : 55½ feet. Draught : 14½ feet
Guns (Bofors) :	4—10 inch, 46 cal., 8—4.1 inch AA., 4—40 mm. AA., 6—20 mm. AA. (Madsen)
Armour :	4"—4½" turrets, ½"—¾" deck, 2½" side, 5" C.T.
Machinery :	Germania Diesels with electric drive, Leonard system, by Brown, Boveri & Co
Oil fuel :	2 shafts. B.H.P. : 5,000 = 15.5 kts.
Complement :	93 tons
	343



General Notes.—Former Finnish coast defence ship. Sold to Russia in Summer, 1947. Stationed at Porkkala.  
Gunnery Notes.—Maximum elevation of 10-inch guns is 53 degrees.

Destroyers.

58 + 10 "Skori" Class. Fast Minelaying Type.



No. 40

1954, Ossi Janson.



SKORI Class.

1954, Ossi Janson.

SERDI  
SKORI  
SUROVI

SMETLIVI  
SMISHLYONI  
SMYELI

SOKRUSHITELNI  
SOVERSHENNI  
STEREGUSHTCHI

STOIKI  
STREMITELNI  
SVOBODNI and others

Displacement : circa 2,200 tons  
Dimensions : 393½ × 37½ × 13½ feet  
Guns : 4—5.1 inch, 2—3 inch AA., 7 to 10—37 mm. AA., 6—20 mm. AA.  
Tubes : 8—21 inch  
A/S weapons : 4 D.C.T.  
Mines : 80  
Speed : 38 kts.  
Complement : 250

Notes.—Equipped with modern target finding and gun sighting radar for 5.1 inch guns in two twin turrets. Some names uncertain.

15 "Ognevoi" Class.

OBRAZTSOVI  
OGNEVOI  
OPASSNI  
OSMISLENNI

OSMOTRITELNI  
OSNOVATELNI  
OSORNOI  
OSTERVENELI

OSTOROSHNI  
OSTROGLASY  
OTCHETLIVI

OTLICHNI  
OTSVESTSVENNI  
OTVASHNI  
and another

Displacement : 1,800 to 2,000 tons (2,650 tons full load)  
Dimensions : 387½ × 36½ × 12½ feet  
Guns : 4—5.1 inch, 55 cal. (twin mounts), 2—3 inch AA., 6 to 10—37 mm. AA., 4 to 6—20 mm. AA.  
Tubes : 6 to 8—21 inch  
A/S weapons : 4 D.C.T.  
Mines : 60  
Machinery : S.H.P. : 60,000 to 70,000 = 36 to 38 kts.  
Oil fuel : 370 tons  
Complement : 212 to 250

Notes.—Completing, on trials, or in service. "Osmotritelni" means "Cautious." Some of the above names reported are questionable.

Destroyers—continued.

I Large Ex-Japanese Type.



1948.

Ex—HARUTSUKI

Launched : 1942

Displacement : 2,701 tons standard (3,485 tons full load)  
Dimensions : 435 (w.l.), 440½ (o.a.) × 38 × 13½ feet  
Guns : 8—4 inch AA., 15—25 mm. AA., (handed over disarmed)  
Tubes : 4—24 inch  
Machinery : Geared turbines. 2 shafts. S.H.P. : 52,000 = 33 kts.  
Boilers : 3 Kampon  
Complement : 290

Notes.—Formerly Japanese vessel of large destroyer or light cruiser type. Delivered to U.S.S.R. at Nakhodoka, Aug. 28, 1947

I Large Ex-German Type.



PROVORNI.

1944, courtesy M. Henri Le Masson.

PROVORNI (ex-Z33)

Builders :  
Launched :

Deschimag, Bremen  
1942

Displacement : 2,603 tons (3,597 tons full load)  
Dimensions : 393½ (p.p.), 420 (o.a.) × 39½ × 9½ (light), 13 (max.) feet  
Guns : 5—5.9 inch, 4—37 mm. AA., 10—20 mm. AA.  
Tubes : 8—21 inch  
Mines : 60  
Machinery : Geared turbines, 2 shafts. S.H.P. : 70,000 = 35 kts.  
Boilers : 6 Wagner  
Oil fuel : 620 tons  
Complement : 320

Notes.—Formerly German. Has completed refit with modified armament and is commissioned for service.

RUSSIA—Destroyers



PRIMYERNI (ex-T 33)

Displacement : 1,300 tons (1,754 tons full load)  
Dimensions : 310 (p.p.), 319 (w.l.), 334½ (o.a.) × 32½ × 9½ feet  
Guns : 4—4.1 inch, 4—37 mm. AA., 6—20 mm. AA., 2 D.C.T.  
Tubes : 6—21 inch  
Machinery : Geared turbines. 2 shafts. S.H.P. : 32,000 = 32 kts.  
Boilers : 4 Wagner  
Oil fuel : 360 tons  
Complement : 190

Notes.—Built by Schichau, Elbing. Launched 1942. Former German so-called torpedo boat but of destroyer dimensions. Stowage for 60 mines. Name "Primerni" means "Representative."

Added 1948.

2 "V" Class.

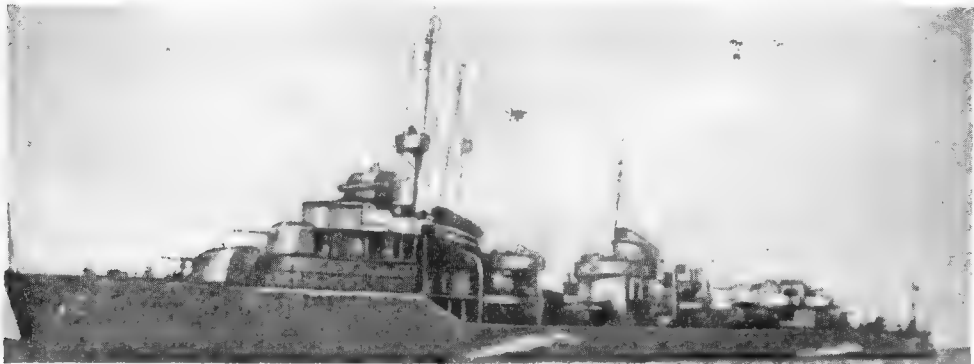
VNIMATELNI

Displacement: 2,400 tons  
Dimensions: 390½ × 38½ × 15½ feet  
Guns: 4—5.1 inch, cal. 55 cal., 2—3 inch AA., 8—13 mm. AA.  
Tubes: 6—21 inch (tripled)  
Mines: 60  
Machinery: S.H.P.: 54,000 = 38 kts.  
Complement: 180

VNUSHITELNI

Notes.—Vnimatelni reported to have been built at Leningrad. Launched 1939. Fitted for minelaying. Vlastni and Vynoslivi also reported.

11 "R" (later "Gordi") Class.



RYANI.  
RASTOROPNI  
RAZIASHTCHI  
RAZUMNI

RAZYARYONNI  
RYEDKI  
REKORDNI

RYANI  
RYESHITELNI

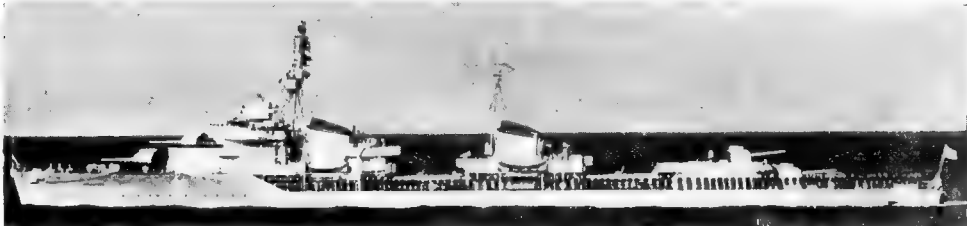
RYESKI  
RYESVI  
RYETIVI

1954, M. J. Meister.

Displacement : 2,000 tons (2,500 tons full load)  
Dimensions : 377 × 36½ × 14½ feet  
Guns : 4—5.1 inch, 55 cal., 2—3 inch, 3—37 mm. AA., 4—13 mm. AA.  
Tubes : 6—21 inch (tripled)  
Machinery : 2 shafts. S.H.P. : 60,000 = 39 kts.

Notes.—"R" boats are of later and larger type than "Gordi" class. "Ryedki" means "Rare."

11 "S" (Improved "Gordi") Class.



SVIREPI.

1948.

VICE ADMIRAL DROZD (ex-Stoiki)  
SILNI  
All in Baltic

SLAVNI  
STOROSHEVOI

STRASHNI  
STROGI

STROINI  
SVIREPI

SOOBRAZITELNI  
In Black Sea

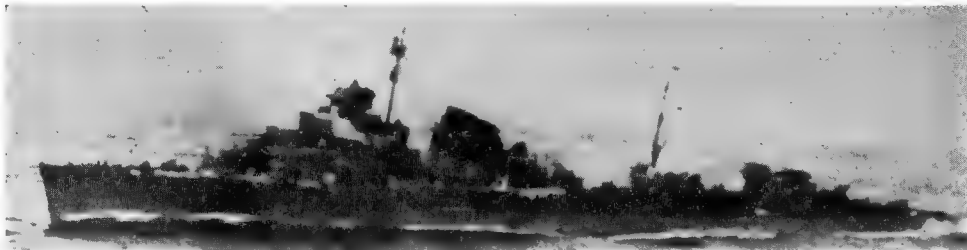
SPOSSOBNI

Ex-SVOBODNI

Displacement: 1,686 tons (2,150 tons full load)  
Dimensions: 367 (pp.), 371 (o.a.) × 33 × 14 feet  
Guns: 4—5.1 inch, 2—3 inch, 50 cal. AA., 4—37 mm. AA., 2 M.G.  
Tubes: 6—21 inch  
Mines: Stowage for 80 mines reported  
Machinery: Geared turbines. 2 shafts. S.H.P.: 48,000 = 36 kts.  
Boilers: 3-drum type  
Oil fuel: 500 tons  
Complement: 240

Notes.—All launched 1939-45. The armament of Storoshevoi has been altered, with one twin turret forward, and she differs in appearance from other vessels of class. War losses : Serditi, Smishlyoni Smyeli, and Skori.

8 "G" ("Gordi") Class.



Added 1954, courtesy M. J. Meister.

BEZUPRECHNI  
BODRI

BOIKI

GREMIASHCHI  
GROMKI

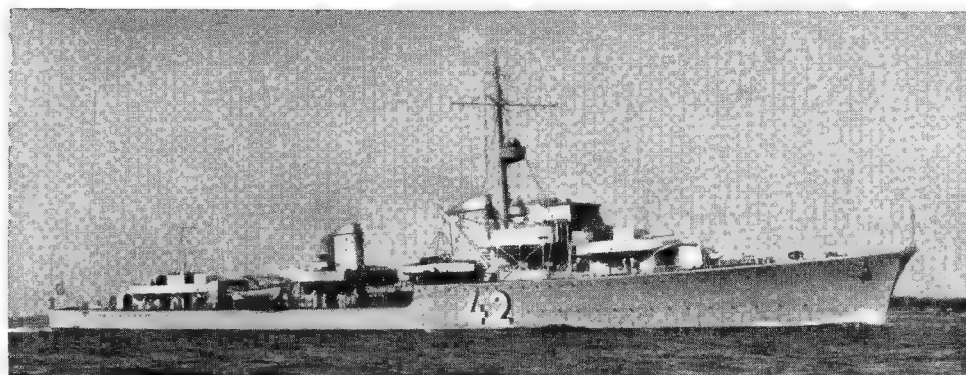
GROZNI  
GROZYASHTCHI

Displacement: 1,657 tons (2,150 tons full load)  
Dimensions: 357½ (pp.), 377 (o.a.) × 33½ × 13 feet  
Guns: 4—5.1 inch, 2—3 inch, 50 cal. AA., 4—37 mm. AA., 8 D.C.T.  
Tubes: 6—21 inch (tripled)  
Mines: 100  
Machinery: Geared turbines of Tosi design. 2 shafts. S.H.P.: 50,000 = 36 kts.  
Boilers: 3-drum type  
Oil fuel: 500 tons  
Complement: 240

Notes.—All launched 1936-41. First three "G" boats in White Sea, fourth in Baltic. "B" boats reported to be all in Black Sea. Fitted for minelaying. These destroyers are said to be better sea boats than Leningrad class, having less top weight. They are understood to be of Odero-Terni-Orlando design. "B" group are of somewhat larger design but with smaller funnels than "G" boats. 55 of this and succeeding classes said by Russians to have been built up to 1948. War losses: Gnievni Gordi, Grosvoei, Gromyashtchi, Bezposhchadni, Bistri, Bezshumni, Bezstrashni, Bdityelni, Smetklivi, Stremitelni, Sokrushitelni, Steregushtchi. Reported latter was salvaged.



### 3 Ex-German Type.



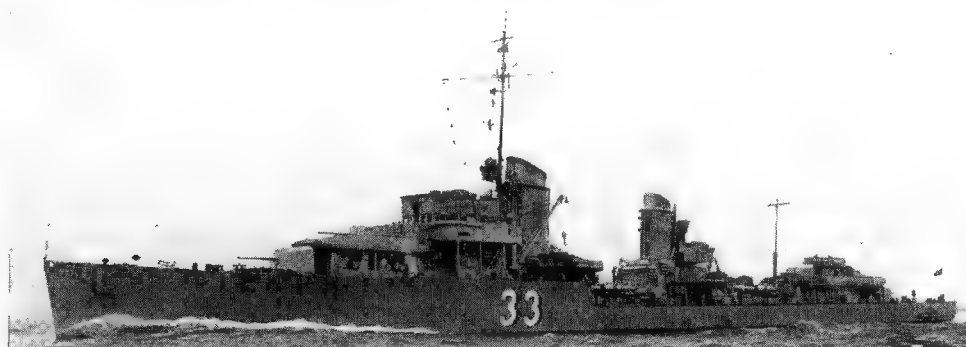
1939, Schafer.

#### PROCHNI (ex-Karl Galster, Z 20)

Builders: Deschimag  
Launched: 1938

Displacement: 2,411 tons (3,415 tons full load)  
Dimensions: 384 (p.p.), 410 (o.a.)  $\times$  38½  $\times$  9½ (mean), 12 (max.) feet  
Guns: 5—5 inch, 12—37 mm. AA.  
Tubes: 8—21 inch  
Mines: 70  
Machinery: Geared turbines. 2 shafts. S.H.P.: 67,000 = 37 kts.  
Boilers: 6 Wagner

Notes.—Ex-German. Reported armament has been changed in accordance with Russian models.



FRIEDRICH IHN.

Added 1940, Renard.

#### PYLKI (ex-Erich Steinbrinck, Z 15)

Displacement: 2,239 tons (3,165 tons full load)  
Dimensions: 374 (p.p.), 381 (w.l.), 390½ (o.a.)  $\times$  37½  $\times$  9½ (mean), 12½ (max.) feet  
Guns: 5—5 inch, 4—37 mm. AA., 14—20 mm. AA.  
Tubes: 8—21 inch  
Machinery: Geared turbines. 2 shafts. S.H.P.: 70,000 = 36 kts.  
Boilers: 6 Wagner  
Oil fuel: 700 tons

#### ZHORKI (ex-Friedrich Ihn, Z 14)

Notes.—Both ex-German. Launched 1936 and 1935 respectively. Built by Blohm & Voss, Hamburg. After the war Erich Steinbrinck had 14—37 mm. AA. guns. New name of Friedrich Ihn also reported as Pritki.

### Destroyers—continued.

#### 2 Ex-Italian Type.



ARTIGLIERE.

1947, Lieut. Aldo Fraccaroli.

#### Ex-ARTIGLIERE (ex-Z 12, ex-Camicia Nera)

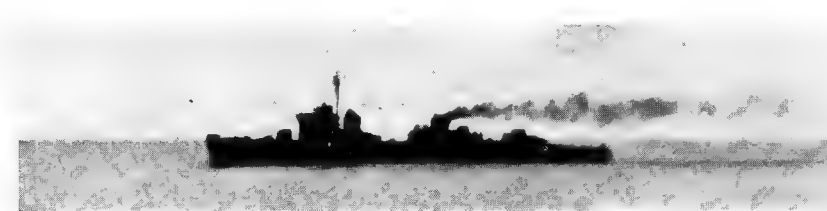
#### Ex-FUCILIERE (ex-Z 20)

Displacement: 1,830 tons standard (2,749 tons full load)  
Dimensions: 339 (w.l.), 350 (o.a.)  $\times$  38½  $\times$  10½ (mean) feet  
Guns: 4—4.7 inch, 3—37 mm. AA., 8—20 mm., 1 M.G.  
Tubes: 3—21 inch (tripled)  
Machinery: 2 sets geared turbines. 2 shafts. S.H.P.: 48,000 = 38 kts. (designed), actual best speed 32 kts.  
Boilers: 3, of 3-drum type  
Oil fuel: 545 tons  
Complement: 215

Notes.—Ceded to Russia under the Italian Peace Treaty. Delivered to Soviet Navy 21 Feb. 1949 and 17 Jan. 1950, respectively

Name	Builders	Laid down	Launched
Artigliere	Odero-Terni-Orlando	Jan. 1937	8 Aug. 1937
Fuciliere	Riuniti, Ancona	May 1937	31 July 1938

#### 1 "Opitni" Type.



#### OPITNI (ex-Serge Orjonikidze)

Launched: 1936

Displacement: 1,570 tons standard (1,870 tons full load)  
Dimensions: 360½ (pp.), 373½ (o.a.)  $\times$  33½  $\times$  10½ feet  
Guns: 3—5.1 inch, 55 cal., 4—45 mm., 3—37 mm. AA., 3 M.G.  
Tubes: 8—21 inch (quadrupled)  
Mines: 70  
Machinery: Geared turbines. 2 shafts. S.H.P.: 70,000 = 40 kts.  
Oil fuel: 370 tons  
Complement: 212

Notes.—Of quite different type from "S" class. Built as an experimental type with light hull and high speed. On trials, when above photo was taken, she reached 41.6 kts., but suffered greatly from vibration at high speed. No further ships of the type were there ordered. Baltic.

RUSSIA—Destroyers

Destroyers—continued.

7 "Leningrad" Class.



MINSK.

1948.

BAKU	LENINGRAD	MINSK	TBILISSI	TOMSK	TULA	TYER
Displacement:	2,225 tons standard (2,582 tons full load)					
Dimensions:	400 (pp.), 418½ (o.a.) × 38½ × 13 feet					
Guns:	4—5.1 inch, 55 cal., 2—3 inch, 50 cal. AA., 5—37 mm. AA., 4 D.C.T.					
Tubes:	8—21 inch (quadrupled)					
Machinery:	Geared turbines. 3 shafts. S.H.P.: 70,000 = 38 kts. (Trials of Leningrad, light, 39.3 kts.)					
Boilers:	3, of 3-drum type					
Oil fuel:	600 tons					

General Notes.—Built 1933-41. Leningrad launched 1935. Fitted for minelaying. Rated as "Lideri" (flotilla leaders). These ships resemble contemporary French Contre-torpilleurs, and construction of earlier units is understood to have been supervised by French technical experts. The 5.1 inch gun abaft the bridge has been removed. Baku in White Sea, Leningrad and Minsk in Baltic, "T" boats in Far East. Hulls of Batum, Otchakov and Perekop were lying at Batum at end of 1941, but material for their construction may have been diverted to the "Ognevoi" class. War losses: Moskva, Harkov.

5 "Uritski" Class.



STALIN.

Added 1953, courtesy M. J. Meister.

KARL LIEBKNECHT (ex-Kap.-Lt. Belli)	STALIN (ex-Samson)	URITSKI (ex-Zabiaka)
KUIBYSHEV (ex-Sgadnev, ex-Rykov, ex-Kap. Kern)		VOIKOV (ex-Trotski, ex-Leit. Ilyin)
Displacement	1,150 to 1,417 tons (1,700 to 1,770 tons full load)	
Dimensions:	314½ (pp.), 321½ (o.a.) × 30½ to 31 × 9½ to 12 feet	
Guns:	4—4 inch, 2—3 inch AA., (Voikov only), 2—57 mm. AA., 2—37 mm. AA., 2—20 mm. AA.	
Tubes:	9—17.7 inch	
Machinery:	Turbines. S.H.P.: 31,000 = 31 to 35 kts. (now less)	
Boilers:	Thornycroft	
Oil fuel:	400 tons	
Complement:	150 to 157	

General Notes.—Launched 1914-15. Kuibyshev, Stalin and Uritski built by Leningrad Metal Works, others by Putilov Works, Leningrad. Kuibyshev and Karl Liebknecht commissioned 1927 and 1928 respectively. All carry mines. Stalin and Voikov in Far East.

Appearance Notes.—Vary according to builders. Some have raking funnel tops. Stalin reconstructed and differs from the remainder of the class in appearance. Uritski was reconstructed in 1937. Kuibyshev has mainmast forward of after funnel.

Destroyers—continued.

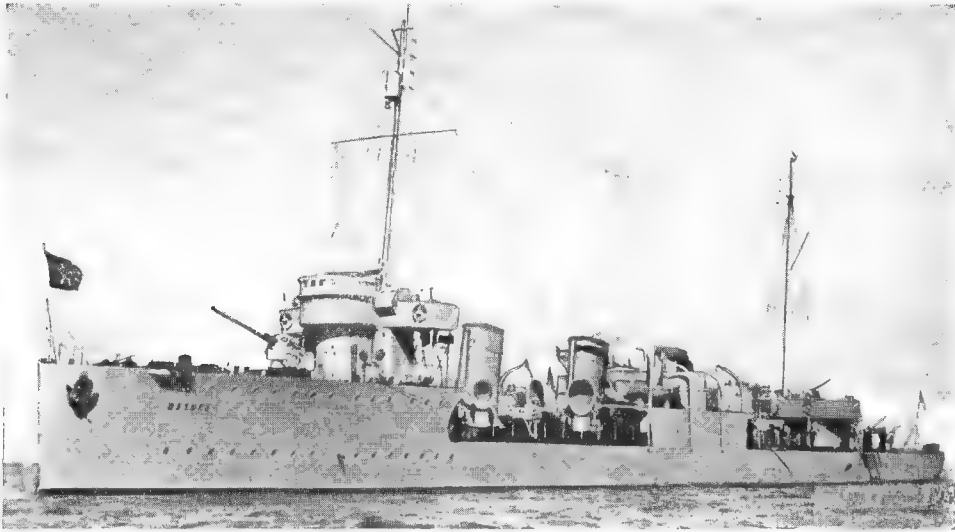
1 Ex-Japanese Type.



Added 1952 Official Photo.

Ex-HIBIKI	Launched	1932
Displacement:	2,300 tons	
Dimensions:	388½ (o.a.) × 34 × 10½ feet	
Guns:	6—5.1 inch, etc.	
Tubes:	9—24 inch. 15 torpedoes	
Machinery:	Parsons geared turbines. 2 shafts. S.H.P.: 50,000 = 34 kts.	
Boilers:	3 Kampon	
Oil fuel:	420 tons	

Note.—Former Japanese. She was the only ship of the modified "Fubuki" class which survived. Delivered to Russia at Nakhodoka July 5, 1947.



1935, I. Weinberg.

NEZAMOSHNIK (ex-Zante)	Displacement :	1,323 tons standard (1,600 tons full load)
	Dimensions:	303½ × 29½ × 9 feet
	Guns:	3—3.9 inch, 2—57 mm., 2—37 mm. AA.
	Tubes:	6—21 inch
	Machinery :	Turbine engines. S.H.P.: 29,000 = 30 kts. (designed) now 26 kts.
	Oil fuel:	390 tons
	Complement:	161

Notes.—Originally designed to carry 80 mines of pre-1914 war pattern, but now has 45 of heavier type. Built at Nikolaiev and launched 1917. Nezamoshnik not completed till 1923. Sister ship Zhelyeznyakov transferred to Bulgaria.

Frigates.



Ex-HATSUZAKUBA.

Added 1953, Hajime Fukaya.

Ex-HATSUZAKURA (ex-Susuki)

Displacement:  
Dimensions:  
Guns:  
Tubes:  
Machinery:  
Boilers:

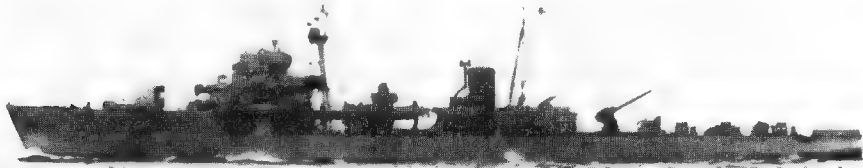
Ex-KAYA

1,580 tons (Hatsuzakura and Shii), 1,530 tons (others)  
328 (o.a.)  $\times$  30 $\frac{1}{2}$   $\times$  11 feet (first two), 10 $\frac{1}{2}$  feet (others)  
3—5.1 inch, 60 cal., 24—25 mm. AA.  
4—24 inch (quadrupled)  
Turbines, 2 shafts. S.H.P.: 19,000 = 27.8 kts.  
2

Ex-KIRI

Ex-SHII

Notes.—Former Japanese Escort destroyers. Launched 1944-45. Delivered to Russia at Nakhodoka, July 5 (Shii) and July 29, 1947.



Added 1952, Hajime Fukaya.

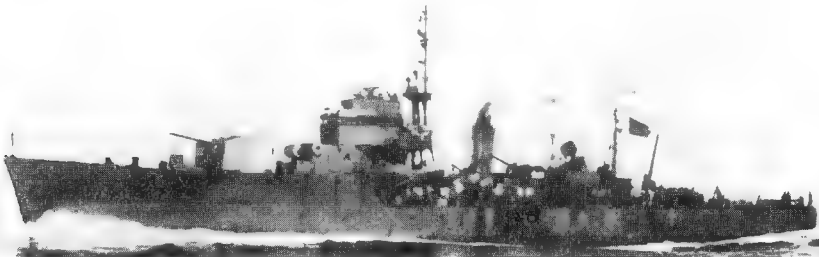
Ex-INO

Ex-KOZU

Displacement:  
Dimensions:  
Guns:  
Machinery:  
Complement:

1,020 tons (1,375 tons full load)  
258 $\frac{1}{2}$  (o.a.)  $\times$  30  $\times$  10 feet  
3—4.7 inch (twin mount and 1 single mount), 2—40 mm. AA., 15—25 mm. M.G., 120 D.C.  
Diesels, 2 shafts. B.H.P.: 4,200 = 19.5 kts.  
150

Notes.—Former Japanese destroyer escorts known as Escorts, Type A, or modified Type B. Launched 1943-44. Delivered to Russia at Nakhodoka July 29, 1947 and Aug. 28, 1947, respectively.



Added 1952, Hajime Fukaya.

Ex-Nos. 34 48 52 76 78 102 142 196

Displacement:  
Dimensions:  
Guns:  
Machinery:

900 tons (1,250 tons full load)  
228 (o.a.)  $\times$  28 $\frac{1}{2}$   $\times$  10 feet  
2—4.7 inch d.p. (single mounts), 12—25 mm. M.G., 120 D.C. (original armament)  
Turbine. S.H.P.: 2,500 = 17.5 kts. (designed)

Notes.—Former Japanese Escorts, Type D or No. 2 Type. Launched 1944-46. Delivered to Russia July 5, 1947 to Aug. 28, 1947.



Ex-No. 221.

Added 1954, Hajime Fukaya.

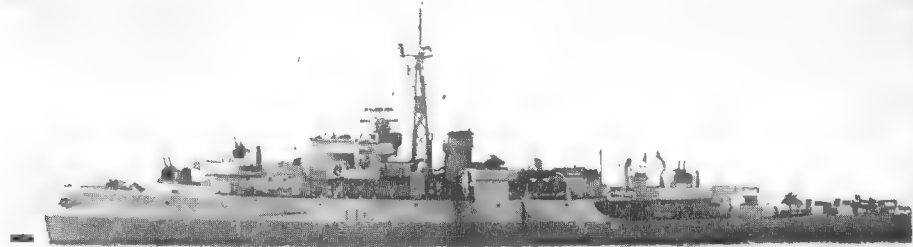


Added 1952, Hajime Fukaya.

Ex-Nos. 71 77 79 105 221 227

Displacement: 810 tons (1,000 tons full load)  
Dimensions: 221 $\frac{1}{2}$  (o.a.)  $\times$  27 $\frac{1}{2}$   $\times$  9 $\frac{1}{2}$  feet  
Guns: 2—4.7 inch d.p. (single mounts), 12—25 mm. M.G., 120 D.C. (original armament)  
Machinery: Diesel. B.H.P.: 1,900 = 16.5 kts. (designed)

Notes.—Former Japanese Escorts, Type C or No. 1 Type. All launched 1943-46. Delivered to Russia July 5, 1947 to Aug. 28, 1947.



Added 1951.

NEPTUN (ex-Lark)

Builders:  
Laid down:  
Launched:  
Completed:

Scott's S.B. & Eng. Co., Ltd.  
5 May 1942  
28 Aug. 1943  
10 Apr. 1944

Displacement: 1,350 tons (designed), (1,925 tons full load)  
Dimensions: 299 $\frac{1}{2}$   $\times$  38 $\frac{1}{2}$   $\times$  11 feet  
Guns: 6—4 inch, 4—40 mm., 2—20 mm.  
Machinery: Parsons geared turbines. 2 shafts. S.H.P.: 4,300 = 19.75 kts.  
Boilers: 2, of 3-drum type  
Complement: 200

Notes.—British war loss (dated 17 Feb., 1945). Officially listed as damaged beyond repair by torpedo. She had been very heavily punished during an Arctic convoy action, and wreck was thought to have been scrapped at Murmansk, but subsequently reported that she was refitted in Russian hands.

## RUSSIA—Frigates



**FORTUNALE.**

**Ex-ANIMOSO (ex-Z 16)**

Displacement: 1,192 tons (1,623 tons full load)  
 Dimensions: 270½ (pp.), 293 (o.a.) × 32½ × 9½ feet  
 Guns: 2—3.9 inch, 60 cal., 12—20 mm. AA. (Fortunale has 3—3.9 inch)  
 Tubes: 4—17.7 inch  
 Machinery: 2 sets Tosi geared turbines. 2 shafts. S.H.P.: 15,000 = 25 kts.  
 Boilers: 2, of 3-drum type  
 Oil fuel: 430 tons  
 Complement: 130

Notes.—Ex-Italian Ceded to Russia under Peace Treaty. Delivered to Russia Feb. 1949, 27 Oct. 1949 and 1 Mar. 1949, respectively.

Name	Builders	Laid down	Launched	Completed
Animoso	Ansaldo, Sestri	3 Apr. 1941	15 Apr. 1942	14 Aug. 1942
Ardimentoso	Ansaldo, S. Pier d'Arena	7 Apr. 1941	29 May 1942	14 Dec. 1942
Fortunale	C.R.D.A., Trieste	9 May 1941	18 Apr. 1942	16 Aug. 1942

1947, Lieut. Aldo Fraccaroli.

**Ex-FORTUNALE (ex-Z 17)**

**Ex-ARDIMENTOSO (ex-Z 19)**



**Ex-SHUMUSHU**

Builders: Tamano (Mitsui)  
 Laid down: 29 Nov. 1938.  
 Launched: 13 Dec. 1939.  
 Complete: 30 June 1940  
 Displacement: 1,020 tons (1,350 tons full load)  
 Dimensions: 255 × 30 × 10 feet  
 Guns: 3—4.7 inch, 15—25 mm. M.G., 60 D.C.  
 Machinery: 2 sets Diesels. 2 shafts. B.H.P.: 4,200 = 19.7 kts.  
 Complement: 147

Notes.—Former Japanese Destroyer Escort known as Escort, Type A. Used for repatriation service after the war. Delivered to Russia at Nakhodka July 5, 1947. Fitted for minelaying. Now has straight bow.

Added 1952, Hajime Fukaya.

## 3 Improved "Birds" Class.

### ALBATROS

Displacement:  
 Dimensions:  
 Guns:  
 Tubes:  
 Machinery:  
 Complement:

### CHAIKA

920 tons (1,300 tons full load)  
 278½ × 27½ × 9½ feet  
 3—4 inch, 4—37 mm. AA., 8 M.G.  
 3—17.7 inch  
 S.H.P.: 23,000 = 34 kts.  
 92

### KRETCHET

Notes.—Improved "Birds" class. Launched 1940. All in Black Sea. Names mean Albatross, Seagull, Buzzard, respectively.

## 7 "Birds" Class.



**YASTREB.**

1948.

### BERKUT

### GRIF

### KONDOR

### KORSHUN

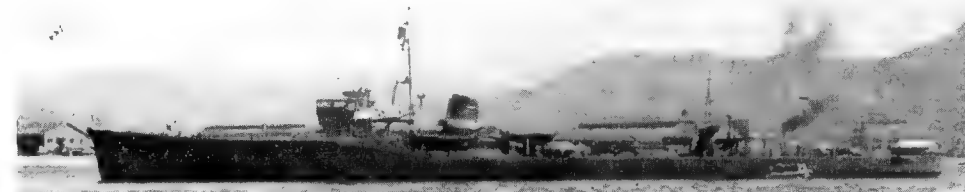
### ORYOL

### VORON

### YASTREB

Displacement: 842 tons (1,250 tons full load)  
 Dimensions: 275 × 27½ × 9½ feet  
 Guns: 3—3.9 inch, 4—37 mm. AA.  
 Tubes: 3—17.7 inch  
 Machinery: S.H.P.: 23,000 = 35 kts.  
 Complement: 98

Notes.—"Birds" class. All launched 1939. In Baltic. Names mean Golden Eagle, Griffin, Condor, Vulture, Eagle, Raven, Hawk, respectively.



KIJI (after being disarmed).

Added 1953, Hajime Fukaya.

### Ex-KIJI

Launched: 1936

Displacement: 1,043 tons  
 Dimensions: 290 × 27 × 9½ feet  
 Guns: 2—3.9 inch, 60 cal., 11—25 mm. AA., 48 D.C.  
 Tubes: 3—21 inch  
 Machinery: Turbines. 2 shafts. S.H.P.: 19,000 = 30.5 kts.  
 Boilers: 2 Kampon

Notes.—Former Japanese torpedo boat taken over under the Peace Treaty. Delivered to Russia at Nakhodka, Oct. 3, 1947

## 2 Ansaldo Type.

### DZERZHINSKI (ex-P.S. 8)

### KIROV (ex-P.S. 26)

Displacement: 810 tons *standard* (1,200 tons *full load*)  
 Dimensions: 249½ (pp.), 262½ (o.a.) × 27½ × 16½ feet  
 Guns: 2—4 inch, 4—40 mm. AA., 2 M.G.  
 Mines: Can carry 40 to 50  
 Machinery: 3 Fiat and Tosi Diesels respectively. 3 shafts. B.H.P.: 4,800 = 20 kts. (Trials: H.P.: 5,400 = 22 kts.)  
 Oil fuel: 44 tons  
 Complement: 120

Notes.—Built by Ansaldo. Launched Aug. 19 and Sept. 18, 1934, respectively. Fitted for minelaying. [Coastguard vessels. In Far East.

## 2 Ex-German Type.

### FODVIZHNOI (ex-T 12)

### PORYVISTI (ex-T 17)

Displacement: 860 tons (1,110 tons *full load*)  
 Dimensions: 267 (pp.), 286 (o.a.) × 28½ × 6½ feet  
 Guns: 1—4.1 inch, (aft), 2—37 mm., 12—20 mm.  
 Tubes: 6—21 inch (tripled)  
 Machinery: Geared turbines. 2 shafts. S.H.P.: 33,000 = 36 kts.  
 Boilers: 4 Wagner  
 Complement: 110

Notes.—Launched 1938-39. Both ex-German torpedo boats or small destroyers. Built by Deschimag, Bremen, and Schichau, Elbing respectively. "Poryvisti" means "Impetuous."

## 3 "Molnya" Class.

### MOLNYA

### SERP

### ZARNITZA

Displacement: 670 tons  
 Dimensions: 236½ × 24½ × 9½ feet  
 Guns: 2—3.9 inch, 4—37 mm. AA., 2 M.G.  
 Tubes: 3—17.7 inch  
 Mines: 50  
 Speed: 31.5 kts.

Notes.—All launched 1937-39. Reported to be a great improvement on design of *Shtorm* class. All in Far East. Three further boats *Mгла*, *Moroz*, *Tuman*, reported in White Sea, but not confirmed.



1948.

### Ex-F7

Builders: Blohm & Voss  
 Laid down: 1935  
 Launched: 25 May 1935  
 Completed: 1936  
 Displacement: 600 tons  
 Dimensions: 241 (pp.), 249½ (o.a.) × 28½ × 8½ (mean) feet  
 Guns: 2—4.1 inch, 50 cal., 4—37 mm. AA., 2 M.G., and D.C.T.  
 Machinery: Geared turbines. 2 shafts. S.H.P.: 9,000 = 28 kts.  
 Boilers: 4 Schulz high pressure  
 Oil fuel: 245 tons

Notes.—Former German escort vessel (geleitboot). Fitted for minelaying. In the Baltic.



PORASHAYUSHTCHI.

1938, courtesy Dr. Erich Gröner.

### PORASHAYUSHTCHI (ex-T 107, ex-G 107)

Builders: Germania, Kiel  
 Launched: 1911  
 Displacement: 760 tons  
 Dimensions: 247½ × 25 × 10½ feet  
 Guns: 1—4.1 inch, 2 M.G.  
 Tubes: 3—21 inch  
 Machinery: 2 sets turbines. 2 shafts. S.H.P.: 16,000 = 25 kts. (designed)  
 Boilers: 3 Schulz  
 Oil fuel: 173 tons

Notes.—Old ex-German torpedo boat, acquired 1946. Speed now considerably reduced. "Porashayushtchi" means "Hitting."

### PRONZITELNY (ex-T 196, ex-G 196)

Builders: Germania, Kiel  
 Launched: 1911  
 Displacement: 797 tons  
 Dimensions: 242½ × 26½ × 10½ feet  
 Guns: 2—4.1 inch, 2 M.G.  
 Tubes: 2—19.7 inch  
 Machinery: 2 sets turbines. 2 shafts. S.H.P.: 18,200 = 25 kts. (now less)  
 Boilers: 3 Schulz  
 Oil fuel: 204 tons

Notes.—Old ex-German torpedo boat, acquired 1946. Now classified as escort vessel on account of reduced speed



PROZORLIVI.

Added 1948

### PROZORLIVI (ex-T 158, ex-V 158)

Builders: Vulkan-Stettin  
 Launched: 1908  
 Displacement: 675 tons  
 Dimensions: 237 × 25½ × 10½ feet  
 Guns: 1—3.5 inch, 1 M.G.  
 Tubes: 2—19.7 inch  
 Machinery: Triple expansion. 2 shafts. I.H.P.: 10,900 = 22 kts. (now less)  
 Boilers: 4 Schulz  
 Oil fuel: 181 tons

Notes.—Old ex-German torpedo boat, acquired 1946. Now classified as escort vessel on account of reduced speed.



RUSSIA—Submarines

Submarines (Podvodniye Lodki).

Notes.—There are now 370 to 400 submarines. About half are of the large or medium oceangoing type. More of the large type are being built. Most are known by numbers; some by names as well.

New Construction.

One 90 submarines are under construction in Soviet dockyards. These include five different types, all fitted with snort, as follows: 1. Improved "K" type with high submerged speed. 2. Fast large minelaying type. 3. German type XXI. 4. German type VII. 5. German type XXIII.

Very Large Oceangoing Type.

Displacement: 2,900 tons submerged  
Dimensions: 320 x — x — feet  
Guns: Twin 3 inch guns in turret before conning tower; twin light AA. on conning tower  
Speed: 20 kts. surface; 16 kts. submerged  
Range: 20,000 miles

Notes.—Very large oceangoing class of design similar to the German type XI and XXI. General appearance very streamlined with complete row of rapid flooding holes along the casing. No information about torpedo armament. This class has been seen in considerable numbers in the Baltic and Far East. Estimated rate of construction believed to be in the region of 18 to 20 annually. First of the class was laid down in 1951 and several were commissioned during 1952.

Seagoing Patrol Type.

Displacement: 1,100 tons surface, 1,600 tons submerged  
Dimensions: 240 (o.a.) x — x — feet  
Guns: 1—3.9 inch in probably retractable turret before conning tower; 1 light AA.  
Tubes: 6—21 inch forward, number aft.  
Speed: 16-17 kts. surface; 16-17 kts. submerged  
Range: 13,000 miles

Notes.—Another class of medium size submarines is under construction in yards throughout the Soviet Union. Very streamlined. Seen in the Far East.

19 "K" Class.



"K" type as rebuilt.

Added 1948.



"K" type before rebuilt.

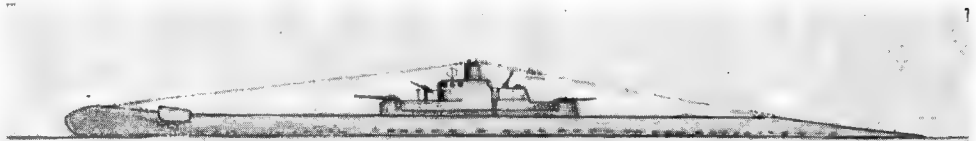
1944, Pictorial Press.

K 1	K 2	K 20	K 21 (White Sea)	K 24
K 51	K 52	K 53	K 54	K 55
K 57	K 58	K 60	K 61	K 62
			K 65	K 77
				K 78

Displacement: 1,457 tons (surface); 2,062 tons (submerged)  
Dimensions: 282 (pp.), 320 (o.a.) x 24 x 14 feet  
Guns: 2—4 inch, 2—45 mm. AA.  
Tubes: 10—21 inch (20 torpedoes carried)  
Machinery: Diesels. B.H.P.: 8,400 = 18 to 22.5 kts. (surface); electric motors, H.P.: 2,400 = 10 kts. (submerged)  
Complement: 62

Notes.—Launched 1939-43. Fitted for minelaying. Developed from "P" type. This class can operate at great distances and for long periods.

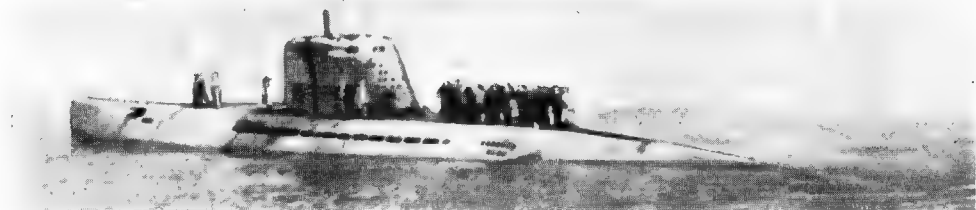
Submarines—continued.



Later "K" type.

1949.

Ex-German Types.



N 27.

1948.

Type XXI

N 27 (ex-U 2529) Ex-U 3538	N 28 (ex-U 3035) Ex-U 3539	N 29 (ex-U 3041) Ex-U 3540	N 30 (ex-U 3515) Ex-U 3541	Ex-U 3542
Displacement: 1,280 tons (designed), 1,600 tons (surface), 1,830 tons (submerged)				
Dimensions: 252½ x 21½ x 20½ feet				
Guns: 4—37 mm. AA.				
Tubes: 6—21 inch (23 torpedoes stowed)				
Machinery: M.A.N. Diesels, B.H.P.: 4,000 = 15 kts. (surface); electric motors, H.P.: 5,000 = 17.5 kts. (submerged)				
Oil fuel: 250 tons				

Notes.—All launched 1944-45. N 27 built by Blohm & Voss, N 28 and N 29 by Deschimag, Bremen, N 30 by Schichau, Danzig. Equippe with snort. Long cruising range. High underwater speed.

Type IXc

N 25 (ex-U 1231)	Builders: Deutsche Werke, Kiel Launched: 1942
Displacement: 850 tons (designed), 1,102 tons (surface), 1,232 tons (submerged)	
Dimensions: 252½ x 22½ x 15½ feet	
Guns: 1—4.1 inch, 4—20 mm. AA., 4 M.G.	
Tubes: 6—21 inch (4 bow, 2 stern) (22 torpedoes stowed)	
Machinery: M.A.N. 9-cyl. Diesels, B.H.P.: 4,400 = 18.2 kts. (surface); and electric motors, 2 shafts, H.P. 1,000 = 7.3 kts. (submerged)	
Oil fuel: 200 tons	
Complement: 52	

Type IIb

Ex-U 18	Ex-U 24
Displacement: 240 tons (surface), 329 tons (submerged)	
Dimensions: 140 x 13½ x 12 feet	
Guns: 2—20 mm. AA.	
Tubes: 3—21 inch (5 torpedoes)	
Machinery: Diesels, B.H.P.: 700 = 13 kts. (surface); electric motors, H.P.: 360 = 7 kts. (submerged)	

Notes.—Raised after being scuttled at Constanza. Used for training. No snort.

## Submarines—continued.

## Ex-German Types.



S 84.

Added 1948.



S 83.

1948.

## Type VII

## S 81 (ex-U 1057)

Displacement: 595 tons (designed), 741 tons (surface), 870 tons (submerged)  
 Dimensions: 220 × 20 × 15½ feet  
 Guns: 1—37 mm. AA., 4—20 mm. AA.  
 Tubes: 5—21 inch (14 torpedoes stowed)  
 Machinery: Diesels of varying types, B.H.P.: 2,800 = 17 kts. (surface); and electric motors. 2 shafts. H.P.: 750 = 7.6 kts. (submerged)  
 Oil fuel: 110 tons  
 Complement: 45

## S 82 (ex-U 1058)

## S 83 (ex-U 1064)

## S 84 (ex-U 1305)

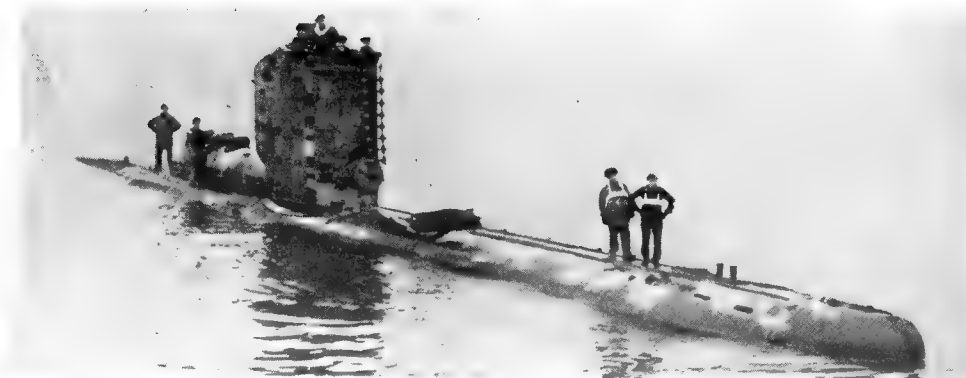
Notes.—Launched 1942–43. First three built by Germania, Kiel; 1305 by Flensburger Schiffbaugesellschaft.

## Seehund type.

Displacement: 15 tons (surface), 16 tons (submerged)  
 Dimensions: 49½ × 6 × 6 feet  
 Tubes: 2—18 inch  
 Machinery: 1 Diesel. B.H.P.: 60 = 7.7 kts. (surface); 1 electric motor. H.P.: 25 = 6 kts. (submerged)  
 Complement: 2

Note.—There are a number of these ex-German "Seehund" type boats. (Midget submarines)

## Submarines—continued.



1948.

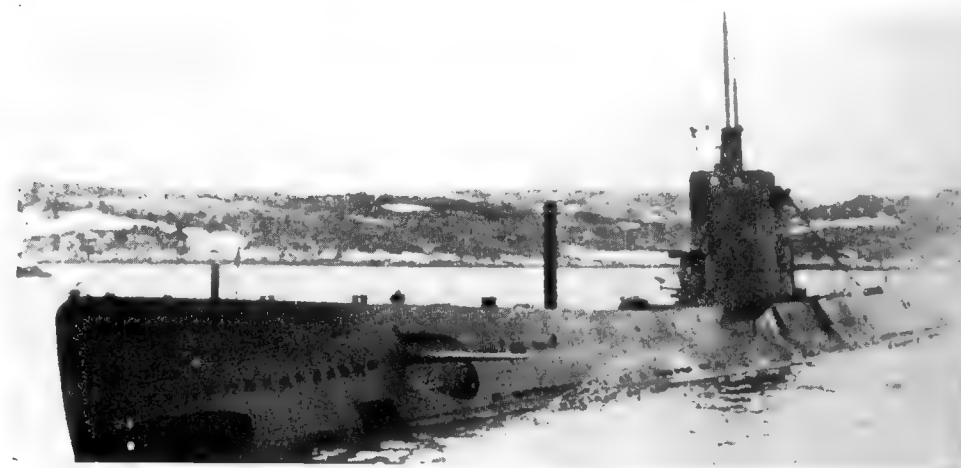
## Type XXIII

## M 31 (ex-U 2353)

Builders: Deutsche Werft, Hamburg  
 Launched: 1944  
 Displacement: 228 tons (surface); 257 tons (submerged)  
 Dimensions: 114 × 11 × 12 feet  
 Tubes: 2—21 inch (only 2 torpedoes stowed)  
 Machinery: 1 Diesel, B.H.P.: 575 = 9.75 kts. (surface); 1 electric motor. H.P.: 580 = 12.5 kts. (submerged)  
 Complement: 13

General Note.—Above is not an exhaustive list of uncompleted hulls of German submarines believed to have been commissioned since falling into Russian hands in 1945.

## 3 "D" Class.



"D" type

## D 2

Displacement: 920 tons (surface)  
 Dimensions: 241 (o.a.) × 24 × 12½ feet  
 Guns: 1—4 inch, 1—45 mm. AA., 1 M.G.  
 Tubes: 8—21 inch  
 Speed: 15 kts. (surface)

## D 1

## D 5

Added 1949.

Notes.—Launched 1939. Believed to be of Italian design. D 2 (named Krassnoarmeyetz) is in Baltic, others in Black Sea. War losses: D 1, D 3, D 6.

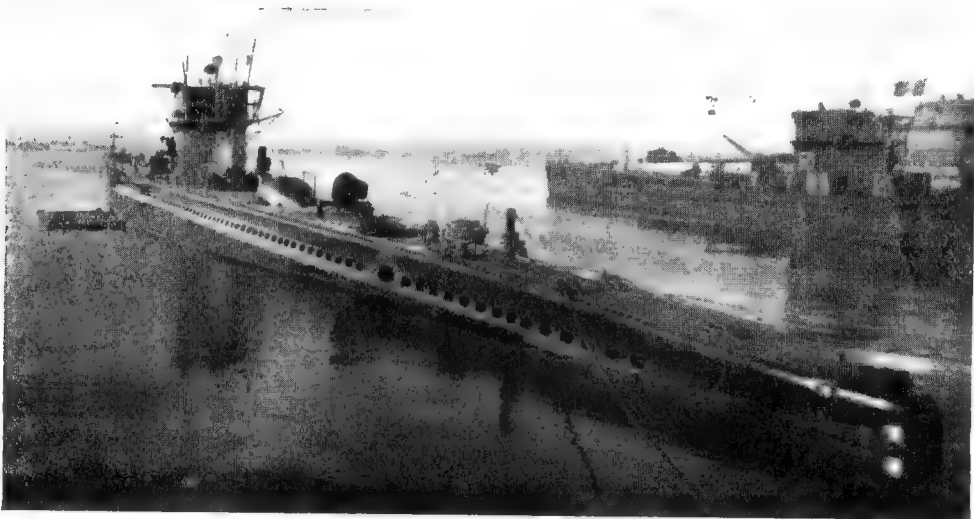
Submarines—continued.  
Ex-Italian Types.



Z 13 (Ex-MAREA)

Added 1951, Lieut. Aldo Fraccaroli.

Builders: C.R.D.A., Monfalcone  
Laid down: 1 Dec. 1941  
Launched: 10 Dec. 1942  
Completed: 7 May 1943  
Displacement: 746 tons standard, 905 tons (surface), 1,068 tons (submerged)  
Dimensions: 207½ × 22½ × 16 feet  
Guns: 1—3·9 inch, 47 cal., 1—20 mm., 4 M.G.  
Tubes: 6—21 inch (bow) (12 torpedoes carried)  
Machinery: Fiat Diesels, 2 shafts. B.H.P.: 2,400 = 16 kts. (surface); H.P.: 1,350 = 8 kts. (submerged).  
Radius of action: 12,000 miles at 8·5 kts.  
Complement: 52  
Note.—Delivered to Russia Feb. 1949.



Added 1951, Lieut. Aldo Fraccaroli.

Z 14 (Ex-NICHELIO)

Builders: O.T.O., Muggiano  
Laid down: 1 July 1941  
Launched: 12 Apr. 1942  
Completed: 30 July 1942  
Displacement: 643 tons standard, 701 tons (surface), 865 tons (submerged)  
Dimensions: 197½ × 21½ × 15½ feet  
Guns: 1—3·9 inch, 47 cal., 4—13·2 mm. M.G.  
Tubes: 6—21 inch (4 bow, 2 stern) (12 torpedoes stowed)  
Machinery: 2 Tosi Diesels, 2 shafts. B.H.P.: 1,350 = 14·7 kts. (surface); 2/Marelli motors, H.P. 800 = 7·9 kts. (submerged).  
Oil fuel: 40 tons (normal), 78 tons (max.)  
Complement: 54  
Note.—Delivered to Russia Feb. 1949.

Submarines—continued.

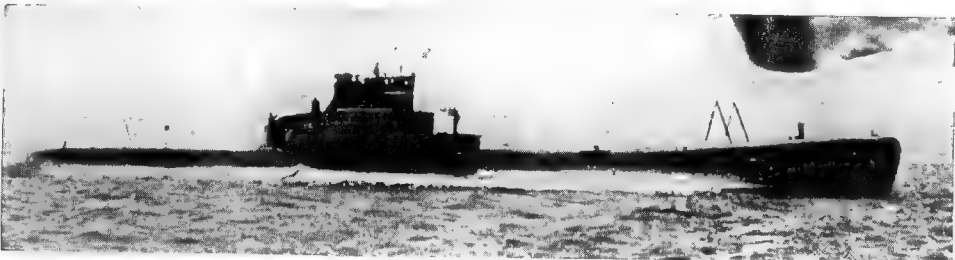
33 + "S" Class.

S 4	S 14	S 18	S 22	S 26	S 50	S 54	S 101	S 137
S 9	S 15	S 19	S 23	S 27	S 51	S 55	S 102	S 139
S 12	S 16	S 20	S 24	S 28	S 52	S 56	S 103	S 140
S 13	S 17	S 21	S 25	S 29	S 53		S 104	S 141

Displacement: 780 tons (surface)  
Dimensions: 256 × 21 × 13 feet  
Guns: 1—3 inch, 1—45 mm. AA.  
Tubes: 6—21 inch  
Speed: 20 kts. (surface); 8·5 kts. (submerged).

Notes.—Launched 1937-40. Further boats of this class reported to be in Far East. *Marsuinul* and *Requinul* returned to Roumania.

72 "Shtcha" Class.



SHTCHA type

1942, Pictorial Press.

Sh. 101	Sh. 105	Sh. 109	Sh. 113	Sh. 117	Sh. 121	Sh. 125	Sh. 129	Sh. 133	Sh. 137
Sh. 102	Sh. 106	Sh. 110	Sh. 114	Sh. 118	Sh. 122	Sh. 126	Sh. 130	Sh. 134	Sh. 138
Sh. 103	Sh. 107	Sh. 111	Sh. 115	Sh. 119	Sh. 123	Sh. 127	Sh. 131	Sh. 135	Sh. 139
Sh. 104	Sh. 108	Sh. 112	Sh. 116	Sh. 120	Sh. 124	Sh. 128	Sh. 132	Sh. 136	Sh. 141
Sh. 201	Sh. 203	Sh. 205	Sh. 207	Sh. 211	In Black Sea				All in Far East
Sh. 305	Sh. 307	Sh. 309	Sh. 310	Sh. 317	Sh. 318	Sh. 407	Sh. 408	In Baltic	
Sh. 401	Sh. 402	Sh. 403	Sh. 404	Sh. 410	Sh. 411	Sh. 412	Sh. 422	Sh. 426	Sh. 428
Sh. 303	Sh. 400	Sh. 425	Sh. 429	Sh. 430					In White Sea
Sh. 308	Sh. 419	Sh. 427	Sh. 431						

Displacement: 620 tons (surface); 738 tons (submerged)  
Dimensions: 190½ × 19½ × 13 feet  
Guns: 2—45 mm. AA., 2 M.G.  
Tubes: 6—21 inch (10 torpedoes)  
Machinery: B.H.P.: 1,600 = 15·5 kts. (surface); 8·5 kts. (submerged)

Notes.—Medium type. Launched 1935-47. Variations in design between earlier and later units. *Shtshuka*, name of first boat built, means pike, and as it began with letter "Shtcha" it became the identification letter of the whole class, which are named after fishes, including *Linj* (305), *Syomga* (308), *Delfin* (309), *Treska* (307) and *Beluga* (310). Several boats of the earlier series of this class have been removed from the active list.

## Submarines—continued.

### I Vickers Type.



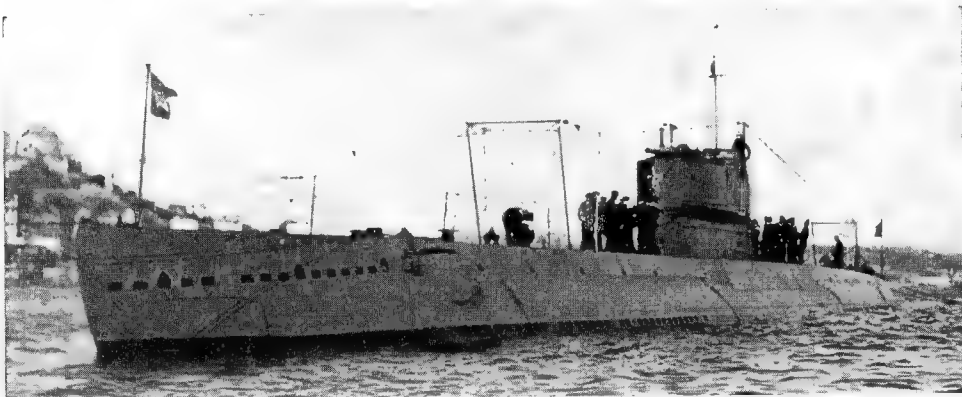
1937, Wright & Logan.

#### LEMBIT

Builders: Vickers-Armstrongs, Barrow  
 Launched: 7 July 1936  
 Displacement: 600 tons (surface) ; 820 tons (submerged)  
 Dimensions: 190 (o.a.)  $\times$  24  $\frac{1}{2}$   $\times$  11  $\frac{1}{2}$  feet  
 Guns: 1—40 mm. AA., 1—20 mm. AA.  
 Tubes: 4—21 inch (bow)  
 Machinery: 2 Vickers Diesels, B.H.P.: 1,200 = 13.5 kts. (surface), Electric motors, H.P.: 450 = 8.5 kts. (submerged)  
 Radius: 2,000 miles at 10 kts.  
 Complement: 30

Note.—This submarine was originally built for the Estonian Navy, and was fitted for minelaying, being designed to carry 20 mines.

### 24 "L" Class.



L 11.

1935, J. Weinberg.

L 3 (ex-Krasnogvardeys) L 21 in Baltic  
 L 4 (ex-Bezbozhnik) L 5 L 6 L 23 L 25 L 31 L 32 in Black Sea  
 L 15 L 20 L 22 in White Sea  
 L 7 L 8 L 9 L 10 L 11 L 12 L 13 L 14 L 16 L 17 L 18 L 19 in Far East.

Displacement: 1,100 tons (surface) ; 1,450 tons (submerged)  
 Dimensions: 263 (pp.), 279 (o.a.)  $\times$  23  $\times$  16  $\frac{1}{2}$  feet  
 Guns: 1—4 inch AA., 1—37 mm. AA., 2 M.G.  
 Tubes: 8—21 inch (6 bow, 2 stern) (12 torpedoes carried)  
 Machinery: B.H.P.: 2,500 = 16 kts. (surface) ; H.P.: 1,200 = 9 kts. (submerged)  
 Radius: 7,000 miles at 9 kts. (surface)  
 Complement: 50

Notes.—Launched 1929-35. Fitted for minelaying, and each carry about 14 mines, according to type and size

## Coastal Submarines.

### 91 Later "M" Type.



Later "M" type.

Added 1953, courtesy M. J. Meister.

M 102	M 116	M 175	M 212	M 241	M 252	M 264	M 276
M 103	M 117	M 177	M 214	M 242	M 253	M 265	M 277
M 104	M 118	M 200	M 215	M 243	M 254	M 266	M 278
M 105	M 119	M 201	M 216	M 244	M 255	M 267	M 279
M 106	M 120	M 202	M 219	M 245	M 256	M 268	M 280
M 107	M 121	M 203	M 234	M 246	M 257	M 269	M 281
M 111	M 122	M 204	M 235	M 247	M 258	M 270	M 282
M 112	M 130	M 205	M 237	M 248	M 259	M 271	M 283
M 113	M 171	M 206	M 238	M 249	M 260	M 272	M 401
M 114	M 172	M 209	M 239	M 250	M 261	M 273	M 404
M 115	M 174	M 211	M 240	M 251	M 262	M 274	M 421
					M 263	M 275	M 515

Displacement: 205 tons (surface), 256 tons (submerged)  
 Dimensions: 146  $\times$  10  $\frac{1}{2}$   $\times$  8  $\frac{1}{2}$  feet  
 Guns: 1—45 mm. AA., 1 M.G.  
 Tubes: 2 or 4—21 inch  
 Machinery: Diesels, B.H.P.: 800 = 13 kts. (surface). Electric motors H.P.: 400 = 8 kts. (submerged)  
 Oil fuel: 18 tons  
 Radius: 3,400 miles at 8 kts. (surface), 90 miles at 3 kts. (submerged)  
 Complement: 20

Notes.—Launched 1940-45. For coastal operations. Enlarged and improved editions of original "M" type. Some reported to have been transported in sections on Trans-Siberian Railway and assembled at Vladivostok for service in the Pacific. Nearly all in the Baltic except M 103-106, 118-122, 172, 174, 175, 177

### 72 Early "M" Type.

M 1	M 10	M 19	M 28	M 38	M 47	M 73	M 86
M 2	M 11	M 20	M 29	M 39	M 48	M 74	M 87
M 3	M 12	M 21	M 30	M 40	M 49	M 75	M 88
M 4	M 13	M 22	M 32	M 41	M 51	M 77	M 89
M 5	M 14	M 23	M 33	M 42	M 55	M 79	M 90
M 6	M 15	M 24	M 34	M 43	M 56	M 80	M 91
M 7	M 16	M 25	M 35	M 44	M 57	M 82	M 92
M 8	M 17	M 26	M 36	M 45	M 62	M 84	M 93
M 9	M 18	M 27	M 37	M 46	M 63	M 85	M 96

Displacement: 161 tons (surface) ; 202 tons (submerged)  
 Dimensions: 124  $\times$  10  $\frac{1}{2}$   $\times$  8  $\frac{1}{2}$  feet  
 Guns: 1—45 mm. AA., 1 M.G.  
 Tubes: 2—21 inch  
 Machinery: B.H.P.: 685 = 13 kts. (surface) ; H.P.: 240 = 7 kts. (submerged)

Notes.—Launched 1935-40. Known by numbers prefixed by "M". All built on a mass-production basis, notably at Gorki, and sent to their assembly ports in sections. Can be easily transported by rail, but have a very limited radius of action. Majority removed from active lists and placed in reserve. Some discarded. M 73, 74, 75, 77, 79, 89, 90, 91, 92, 93, 96 in Baltic.

RUSSIA—Patrol Vessels

Patrol Vessels.



LUGA (ex-Estonian Pikker)

Displacement: 500 tons standard  
Dimensions: 190 × 23½ × 7½ feet  
Guns: 2—3 inch, 50 cal., some small AA.  
Machinery: Diesel engines. 2 shafts  
Speed: 16 kts.

Added 1951, courtesy M. Meister.

Notes.—Built at Reval (Tallinn). Launched 1939. Completed 1940. Built as presidential yacht and training ship for the Estonian Fleet; taken over by Russians 1940. In the Baltic. Officially rated as patrol vessel. Reported to be serving as tender to M.T.B.'s in Baltic.

BIRILYANT

RUBIN

SAPFIR

Displacement: 550 tons  
Dimensions: 203 × 23 × 9 feet  
Guns: 1—4 inch, 2—37 mm., 2—13 mm. M.G., D.C.  
Machinery: 2 shafts. S.H.P.: 2,300 = 17 kts.  
Oil fuel: 85 tons  
Complement: 58

12 "Shtorm" Class.



Added 1948.

BURUN  
GROM

GROZA  
METELJ

SHKVAL  
SHTORM

SMERTCH  
TAIFUN

TOOTCHA  
URAGAN

VICHR  
VYOUGA

Displacement: 487 tons (620 tons full load) Ships vary  
Dimensions: 233 (pp.) × 24 × 8½ feet  
Guns: 2—3.9 inch, 4—45 mm. AA., 4 M.G., 2 D.C.T.  
Tubes: 3—17.7 inch (tripled)  
Mines: 50  
Machinery: Geared turbines. 2 shafts. S.H.P.: 5,000 to 6,500 = 24 to 25 kts.  
Boilers: 2, of 3-drum type  
Oil fuel: 115 tons  
Complement: 72

Notes.—All launched 1932-36. Reported ore and aft gun turrets removed, replaced with AA. guns. Mainmast removed. Officially rated as escort vessels or storoshevoi korably (guardships). Shtorm and Shkval (Group I) stationed in Black Sea, Burun, Grom, Metelj, Vyouga in Far East, Groza, Smertch, Uragan (Group III) in White Sea, Taifun, Tootcha Vichr (Group II) in Baltic. War losses: Burya Purga, Tsiklon, Snyeg.

TW (ex-TF 2)

TW½ (ex-TF 4)

TW (ex-TF 9)

TW (ex-TF 15)

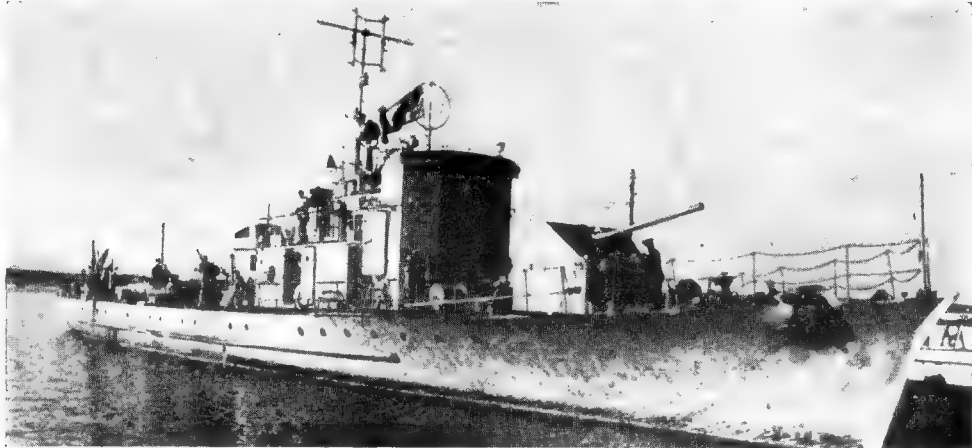
TW (ex-TF 17)

Displacement: 426 tons  
Dimensions: 203½ × 22 × 6½ feet  
Guns: 2—20 mm.  
Machinery: Turbines. S.H.P.: 6,240 = 25 kts.

90 "Kronstadt" Class

Displacement: 300 tons  
Dimensions: Length: 164 feet  
Guns: 1—3.9 inch, 2—37 mm. AA., 3—20 mm. AA.  
Speed: 27 kts.

Notes.—Built 1950-53. Flush decked, large squat funnel, slightly raked, massive block bridge structure.



Added 1953, courtesy M. J. Meister.

ARTILLERIST  
ELEKTRIK  
KIROVETS

LETCHIK  
MASHINIST

MATORIST  
MEKHANIK  
PILOT

SHTURMAN  
TRIUMNI  
TURBINIST

Displacement: 240 tons  
Dimensions: 157½ × 19 × 6 feet  
Guns: 1—3 inch, 2—37 mm., 3 M.G., 2 D.C.T.  
Machinery: S.H.P.: 3,300 = 23 kts.

KONSTRUCTOR (ex-Sibirski Stryelok)

Displacement: 750 tons  
Dimensions: 234½ × 26½ × 11½ feet  
Guns: 3—3 inch AA., 2—45 mm. AA., 2 M.G.  
Machinery: Reciprocating engines. 2 shafts. Present speed = 20 kts.

Notes.—Old torpedo boat. Launched 1906. Officially classed as gunboat. 50 mines. 2 funnels. In Baltic.

ALTFATER (ex-Turkmenetz-Stravropolski)

Displacement: 800 tons  
Dimensions: 240 × 23½ × 7½ feet  
Guns: 3—3.9 inch, 2—45 mm. AA., 2—37 mm. AA., 4 M.G. (originally carried 16 mines)  
Machinery: Triple expansion. 2 shafts. I.H.P.: 6,200 = 19 kts. (designed speed 25 kts.)  
Boilers: 4 Normand. Coal: 50 tons normal, 135 tons full load  
Complement: 110

Notes.—Built by Lange's Yard, Riga. All launched 1904. Old torpedo boats, now classified as gunboats. All three are in Caspian.

PIRMUNAS (ex-Smetona, ex-M 59)

Displacement: 350 tons (525 tons full load)  
Dimensions: 183½ × 24½ × 8½ (max.) feet  
Guns: 2—3 inch, 3 M.G. (Smetona), 3—3 inch, 2—6 pdr. (Virsaitsis)  
Machinery: 2 sets triple expansion. 2 shafts. I.H.P.: 1,850 = 16 kts.  
Boilers: 2 Schultz. Coal: 160 tons  
Complement: 48

Notes.—Both launched 1917. Ex-German minesweepers reconstructed, and previously owned by Lithuania and Latvia respectively. Built by Seebeck, Geestemunde, and Neptun, Rostock, respectively.

AMETIST (ex-Sulev, ex-A 32)

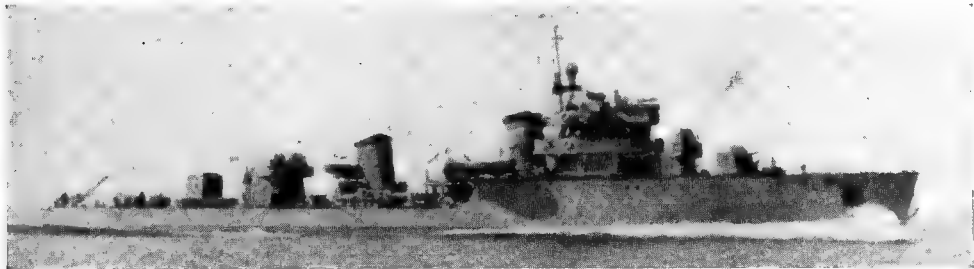
Displacement: 228 tons  
Dimensions: 165½ × 17½ × 6 feet  
Guns: 2—3 inch, 50 cal.  
Tubes: 2—18 inch, in double deck mounting  
Machinery: Designed S.H.P.: 3,500 = 26 kts.  
Oil fuel: 50 tons  
Radius: 975 miles at 20 kts.  
Complement: 35

Notes.—Built at Elbing, 1916. Sunk off Estonian coast, Oct. 1917, salvaged and refitted 1923. Can carry 10 mines. Mainmast shortened 1932. Refitted 1935. This vessel, formerly a unit of the Estonian Navy, was originally German. Officially rated patrol boat.



Fast Minesweepers.

15 "Vasili Gromov" Class.



VASILII GROMOV.

Added 1950.

IVAN SLADKOV

VASILII GROMOV

VLADIMIR POLUKHIN

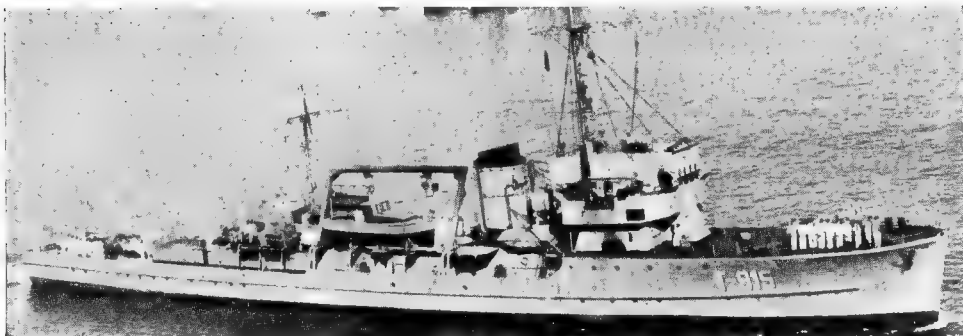
and others

Displacement: 600 tons (800 tons full load)  
Dimensions: 250 (o.a.) × 26 × 8½ feet  
Guns: 2—4 inch, 3—37 mm. AA., 2—20 mm. AA., 4—13 mm. M.G.  
Machinery: Diesel. 2 shafts. B.H.P.: 8,000 = 24 kts.  
Oil fuel: 190 tons  
Complement: 116

Notes.—Launched 1940-50. Appear to be an enlargement of *Fugas* type on following page, but are more like destroyers in silhouette. Also reported are an improved "Vasili Gromov" class of 17 fast minesweepers similar to *Vladimir Polukhin* but have 3-inch guns. Reported 12 at Vladivostok and 5 at Leningrad.

Ocean Minesweepers.

14 Ex-German Type.



T 915.

1946, London Studio.

Type I. T 911-924 (ex-German M 3, 7, 17, 29, 30, 34, 151, 154, 155, 203, 204, 254-256)

Displacement: 710 tons (900 tons full load)  
Dimensions: 229½ × 28½ × 9 feet  
Guns: 2—4.1 inch, 1—37 mm. AA., 8—20 mm. AA.  
Machinery: Bersig reciprocating. 2 shafts. I.H.P.: 3,500 = 18-3½ kts.  
Boilers: 2 Wagner  
Fuel: 125 tons

Notes.—All launched 1937-42. All reported to be in Black Sea.

34 Ex-U.S. Type.



Ex-ADMIRABLE.

Added 1954, Official.

Ex-ADMIRABLE  
Ex-ADOPT  
Ex-ADVOCATE  
Ex-AGENT  
Ex-ALARM  
Ex-ALCHEMY  
Ex-APEX  
Ex-ARCADE  
Ex-ARCH

Ex-ARMADA  
Ex-ASPIRE  
Ex-ASSAIL  
Ex-ASTUTE  
Ex-AUGURY  
Ex-BARRIER  
Ex-BOMBARD  
Ex-BOND

Ex-CANDID  
Ex-CAPABLE  
Ex-CAPTIVATE  
Ex-CARAVAN  
Ex-CAUTION  
Ex-DISDAIN  
Ex-FANCY  
Ex-INDICATIVE

Ex-MARVEL  
Ex-MEASURE  
Ex-METHOD  
Ex-MIRTH  
Ex-NUCLEUS  
Ex-PALISADE  
Ex-PENETRATE  
Ex-PERIL  
Ex-RAMPART

Displacement: 650 tons standard (945 tons full load)  
Dimensions: 180 (w.l.), 184½ (o.a.) × 33 × 10 (max.) feet  
Guns: 1—3 inch D.P., 2—40 mm. AA., 6—20 mm. AA.  
Machinery: Diesel. 2 shafts. B.H.P.: 1,900 = 16 kts.  
Complement: 100

Notes.—All launched 1942. Acquired during 1943.

29 Ex-German Type.



1954, Official.

Type II. T 701-729 (ex-German M 265, 267, 279, 291, 324, 330, 341, 342, 348, 369, 377, 386, 401, 405-407, 411, 415, 423, 425, 431, 443, 446, 456, 461, 467, 471, 484, 496).

Displacement: 551 tons (748 tons full load)  
Dimensions: 202 × 28 × 9 feet  
Guns: 1—4.1 inch, 1—37 mm. AA., 10—20 mm. AA.  
Machinery: Reciprocating, with exhaust turbine. 2 shafts. I.H.P.: 2,150 = 16-7 kts.  
Boilers: 2 modified Schulz  
Ccal: 142 tons

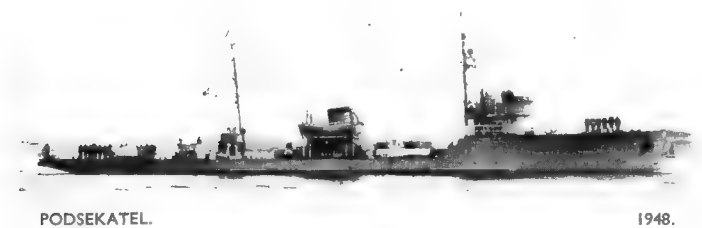
Notes.—All launched 1941-44. Majority in Baltic or White Sea. One mast.

Fleet Minesweepers—continued.

Ex-Japanese Type.

Ex-No. 20	Ex-No. 23
Displacement : 755 tons	
Dimensions : 238 × 25½ × 8½ feet	
Guns : 2—3·9 inch, 2 M.G.	
Machinery : Turbines, 2 shafts. S.H.P. : 3,850 = 20 kts.	
Boilers : 2 coal- and oil-fired	
Notes.—Former Japanese. Launched 1940.	
Ex-No. 12	Feb. 18, 1939.
Launched :	
Displacement : 630 tons	
Dimensions : 226 × 25½ × 7½ feet	
Guns : 3—4·7 inch, 2 M.G.	
Machinery : Triple expansion, 2 shafts. I.H.P. : 3,850 = 20 kts.	
Boilers : 3 Kampon, coal-fired	
Note.—Former Japanese.	
Ex-No. 17	Osaka.
Builders :	3 Aug. 1935.
Launched :	
Displacement : 707 tons	
Dimensions : 238 × 26 × 8½ feet	
Guns : 2—3·9 inch, 2 M.G.	
Machinery : Turbines, 2 shafts. S.H.P. : 3,200 = 19 kts	
Boilers : 2 coal and oil-fired	
Note.—Former Japanese.	

40 "Fugas" Class.



BUI CHEKA GAFEL (T205) GAK (T210) GARPUN GRUZ ISKATEL KAPSULJ KONTERADMIRAL KHOROSHKHIN KRAMBOL MATROS	MINA MINREP PARAVAN PATRON PLAMYA PODSEKATEL PROVODNIK RYM (T211) SHKIV SHIPILL (T207) SHTCHIT	STRELA TRAL TROSS UDARNIK VYEKHA VERP VZRYF YAKORJ ZAPAL ZARYAD and others
Displacement : 441 tons (540 tons full load)		
Dimensions : 187 (pp.), 203 (o.a.) × 23½ × 7½ feet		
Guns : 1—4 inch, 2—37 mm. AA.		
Mines : 40		
Machinery : Diesel, 2 shafts. B.H.P. : 2,800 = 18 kts.		
Oil fuel : 96 tons		
Complement : 55		

Notes.—Fitted for minelaying and minesweeping. T 205, 207, 210, 211, 215, 217, 218, 219 in Baltic. Built in two series 1935-36, 1941-44. Reported to be good sea boats, very handy and effective in minesweeping. "Yakorj" means "Anchor." *Fugas* (201), 202, 203, 204, 206, 208, 209, 212, 213, 217 and *Vzryvatel*, war losses.

T 401-420 (ex-P.S.K. 1-20).

Notes.—P.S.K. (*Pogranitchni Storoshevoi Korably*—frontier patrol vessel) were built as coast-guard vessels. Taken over by Navy 1940 and fitted for minesweeping. Differ slightly from *Fugas* boats. All in White Sea. Round stern as opposed to square stern of *Fugas* type

2 Ex-Finnish Type.

PIONEER (ex-Korshun)	
Displacement : 410 tons	
Dimensions : 170½ (o.a.) × 24½ × 11 feet	
Guns : 2—3·9 inch, some small AA.	
Machinery : Triple expansion, 2 shafts. I.H.P. : 1,400 = 15 kts.	
Boilers : 2 cylindrical	
Coal : 70 tons	
Notes.—Launched 1916. Escort vessel officially rated as minesweeper. Sister ship of Finnish <i>Hameenmaa</i> .	
MINYOR (ex-Yastreba, ex-Finnish SS Bore I)	
Launched : 1913	
Displacement : 350 tons	
Dimensions : 164 × 23 × 9½ feet	
Guns : 2—3·9 inch, 60 cal., 1—37 mm. AA.	
Mines : 70	
Speed : 13 kts.	
Notes.—Taken over by Imperial Russian Navy, 1916. Escort vessel fitted for minelaying and minesweeping. Officially rated as minesweeper.	

Coastal Minesweepers.

100 "T 301" Class.



T 371 Series	
Displacement : 130 tons	
Dimensions : 100 × 16 × 4½ feet	
Guns : 2—20 mm. AA., 4 M.G.	
Machinery : Diesel. B.H.P. : 480 = 10 kts.	
Complement : 30	
Note.—Same type as "Polish" "Albatros" class. T 341, 356, 376, 442, 459, 460 and others.	

1 Ex-British Type.

SHIKA	
Launched : 1929	
Measurement : 251 tons gross	
Note.—Ex-whaler fitted for minesweeping, and lent by Great Britain in 1942.	

4 Dutch Design.

Ex-RA 102	Ex-RA 103	Ex-RA 104	Ex-RA 105
Displacement : 55 tons			
Machinery : Diesel			
Notes.—Launched 1940. Built at Semwerder. Wood.			

43 Ex-U.S. Type.



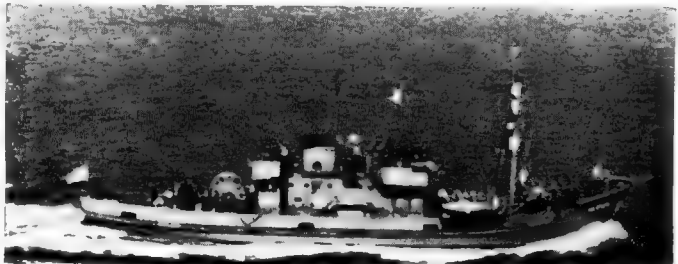
T 182.	Ex-YMS 100	Ex-YMS 216	Ex-YMS 288	Ex-YMS 455
Ex-YMS 33	Ex-YMS 135	Ex-YMS 237	Ex-YMS 295	Ex-YMS 456
Ex-YMS 42	Ex-YMS 139	Ex-YMS 241	Ex-YMS 301	Ex-YMS 457
Ex-YMS 59	Ex-YMS 143	Ex-YMS 260	Ex-YMS 332	Ex-YMS 460
Ex-YMS 75	Ex-YMS 144	Ex-YMS 266	Ex-YMS 428	Ex-YMS 462
Ex-YMS 85	Ex-YMS 145	Ex-YMS 272	Ex-YMS 435	Ex-YMS 464
Ex-YMS 88	Ex-YMS 178	Ex-YMS 273	Ex-YMS 447	Ex-YMS 465
	Ex-YMS 180	Ex-YMS 285	Ex-YMS 448	Ex-YMS 466
	Ex-YMS 184	Ex-YMS 287	Ex-YMS 453	Ex-YMS 469
Displacement : 215 tons				
Dimensions : 136 × 24½ × 6 feet				
Guns : 1—3 inch d.p., 2—20 mm. AA., 2 D.C.T.				
Machinery : Diesel. Oil fuel : 16 tons. B.H.P. : 1,000 = 12 kts.				
Notes.—Launched 1943. All acquired in 1945. T 181-T 186 in Baltic. T 334 Far East.				

12 Ex-British 126 ft. Type

Ex-MMS 1005	Ex-BEECH LAKE	Ex-HICKORY LAKE	Ex-POPLAR LAKE
Ex-MMS 1023	Ex-CEDAR LAKE	Ex-LARCH LAKE	Ex-SPRUCE LAKE
Ex-ALDER LAKE	Ex-ELM LAKE	Ex-PINE LAKE	Ex-WILLOW LAKE
Displacement : 360 tons			
Dimensions : 126 (pp.), 140 (o.a.) × 26 × 10½ feet			
Guns : 2—40 mm. AA., 2—20 mm. AA.			
Machinery : Diesel. B.H.P. : 500 = 10 kts.			

Notes.—Launched 1944-45. Built in Canadian shipyards on "Mutual Aid" account, and delivered 1945-46. Ex-MMS 1005, 1023 acquired from Great Britain.

3 Ex-British 105 ft. Type.



Ex-MMS 90.	Ex-MMS 203	Ex-MMS 212
Displacement : 250 tons		
Dimensions : 105 (pp.), 119 (o.a.) × 23 × 9½ feet		
Guns : 2—20 mm. AA., etc.		
Machinery : Diesel. B.H.P. : 500 = 10 kts.		
Complement : 20		

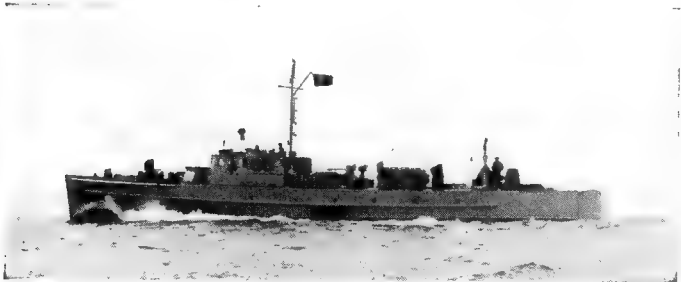
Note.—Acquired from Great Britain.

Coastal Minesweepers—continued.

50 Ex-German Type.

Ex-R 302, R 303, R 305, R 307 R 308, R 310, R 311, R 312.

Displacement : 177 tons  
Dimensions :  $134\frac{1}{2} \times 19\frac{1}{2} \times 6$  feet  
Guns : 1—37 mm. AA., 3—20 mm. AA.  
Machinery : Burmeister & Wain Diesel. B.H.P. : 3,178 = 23 kts.



1939, Dr. Erich Groner.

Ex-R 149 R 234 R 245 R 257 R 262 R 264 R 288  
R 238 R 254 R 265 R 270 R 289 R 409-453

Displacement : 145 tons (R 149 155 tons)  
Dimensions :  $128\frac{1}{2} \times 18\frac{1}{2} \times 5$  feet  
Guns : 3—20 mm. AA.  
Machinery : M.A.N. Diesel. B.H.P. : 2,500 = 21 kts

Ex-R 53, 58, 63, 65, 87, 90, 103, 105, 107, 113, 122, 124.

Displacement : 125 tons  
Dimensions :  $124 \times 19 \times 5$  feet  
Guns : 3—20 mm. AA.  
Machinery : Diesel. 2 shafts. B.H.P. : 1,800 = 20 kts.  
Complement : 20

Notes.—Launched 1939-41. Wood.



Ex-R 28.

Added 1948.

Ex-R 23 Ex-R 28  
Displacement 115 and 110 tons  
Dimensions  $116 \times 16\frac{1}{2} \times 5\frac{1}{2}$  feet  
Guns 1—20 mm. AA.  
Machinery M.A.N. Diesels. 2 shafts. B.H.P. : 1,800 = 18 kts.  
Complement 16

Notes.—Launched 1937. Wood

5 "N" Type.

N 1 N 2 N 3 N 4 N 5  
Displacement : 200 tons  
Guns : 1—3 pdr., 1 M.G.  
Machinery : Diesel engines  
Speed : 16 kts.

Note.—Launched 1934-35.

Minelayers.

Notes.—The Russian Navy is capable of a considerable mine-laying effort. In addition to specialised minelayers, most cruisers and destroyers, some submarines, and other craft, are fitted for minelaying which has always been a highly specialised branch of the Russian Navy.



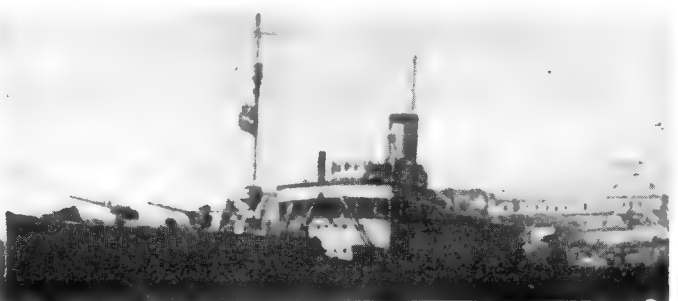
Added 1953, Hajime Fukaya.

Ex-KAMISHIMA

Builders : Sasebo  
Laid down : 20 Feb. 1945  
Launched : 12 June 1945  
Completed : 30 July 1945

Displacement : 766 tons standard (800 tons full load)  
Dimensions :  $228$  (p.p.),  $240\frac{1}{2}$  (w.l.),  $244\frac{1}{2}$  (o.a.)  $\times 25\frac{1}{2} \times 8\frac{1}{2}$  feet  
Guns : 2—40 mm. AA., 13—25 mm. AA., '36 D.C. (original)  
Mines : 120  
Machinery : 2 Diesels. B.H.P. : 1,900 = 16.5 kts.

Notes.—Former Japanese light minelayer. To meet the urgent requirement to lay mines along the Japanese coast this type was built very hurriedly, being designed with simple hull without camber or sheer, except at bow, and hexagonal section funnel.



Added 1954, courtesy M. J. Meister.

ARGUN

Launched : 1939.  
Displacement : 4,200 tons  
Dimensions :  $318\frac{1}{2} \times 46 \times 18$  feet  
Guns : 4—5.1 inch, 3—3 inch, 4—37 mm. AA., 3 M.G.  
Mines : 800  
Machinery : Triple expansion. 2 shafts. I.H.P. : 1,550 = 11 kts

Note.—In Far East.

OKHOTSK

Launched : 1938.  
Displacement : 3,200 tons  
Dimensions :  $265\frac{1}{2} \times 42\frac{1}{2} \times 18\frac{1}{2}$  feet  
Guns : 3—5.1 inch, 2—3 inch, 2 M.G.  
Machinery : Triple expansion. 2 shafts. I.H.P. : 2,400 = 14 kts.  
Complement : 160

Note.—In Far East.

Minelayers—continued.

MURMANSK

Launched : 1937.

Displacement : 3,000 tons  
Dimensions :  $266 \times 42\frac{1}{2} \times 15\frac{1}{2}$  feet  
Guns : 3—5.1 inch, 4—3 inch  
Mines : 150  
Machinery : Triple expansion. 2 shafts. I.H.P. : 2,400 = 14 kts.  
Note.—In White Sea.

URAL (ex-Felix Dzenzhinski)

Launched : 1929

Displacement : 2,800 tons  
Dimensions :  $331\frac{1}{2} \times 48 \times 25\frac{1}{2}$  feet  
Guns : 4—3.9 inch, 2—37 mm. AA., 4 M.G.  
Speed : 12 kts

Notes.—Now used as a training ship.

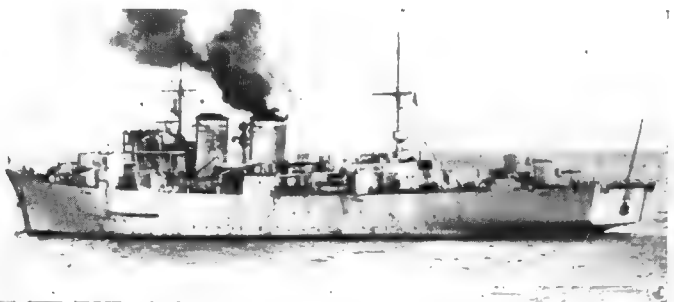
VOROSHILOVSK

Displacement : 2,300 tons  
Dimensions :  $302 \times 40 \times 16\frac{1}{2}$  feet  
Guns : 4—3 inch, 2 M.G.  
Mines : 400  
Machinery : Triple expansion. I.H.P. : 750 = 9 kts.  
Coal : 630 tons  
Complement : 160

Ex-KATASHIMA

Launched : Feb., 1917

Displacement : 420 tons  
Dimensions :  $150 \times 25 \times 7\frac{1}{2}$  feet  
Machinery : I.H.P. : 600 = 12 kts.



Added 1948.

MARTY (ex-Shtandart)

Builders : Copenhagen.

Launched : 4 Aug., 1896.

Displacement : 5,980 tons (6,900 tons full load)  
Dimensions :  $370\frac{1}{2}$  (w.l.),  $400$  (o.a.)  $\times 50\frac{1}{2} \times 20$  (mean), 22 (max.) feet  
Guns : 4—5.1 inch, 55 cal., 7—3 inch, 3—45 mm. AA., 3 M.G.  
Mines : 500  
Armour : 2" deck  
Machinery : Geared turbines. 2 shafts. S.H.P. : 11,500 = 20 kts.  
Boilers : 4 Yarrow  
Oil fuel : 930 tons  
Complement : 400

Notes.—This ship is the former Imperial yacht, laid down at Copenhagen in 1893, and re-engined and rebuilt as a minelayer at Leningrad in 1935-7. Refitted at Rostock yard, Russian occupation zone of Germany, winter 1948-49. May have changed her name again.

Mining Tenders.

MU 50 MU 51 MU 52 MU 53 MU 54  
Displacement : 180 tons  
Guns : 1 M.G.  
Machinery : Diesel  
Speed : 12 kts.

Notes.—Launched 1936-38. Are attached to Mining School as Tenders.

## RUSSIA—Motor Torpedo Boats, etc.

### Motor Torpedo Boats.

Notes.—Total about 460. Ships of the "Marine Border Guard": pendant designations as follows:—

MO (Morskoy Okhotnic) MTB type vessels (Sea Hunter)  
SK (Storozhevoy Kater) MTB and U.S. SC type (Guard Cutter)  
PK (Pogranichnyy Kater) MTB type including PK 14 (Border Cutter)

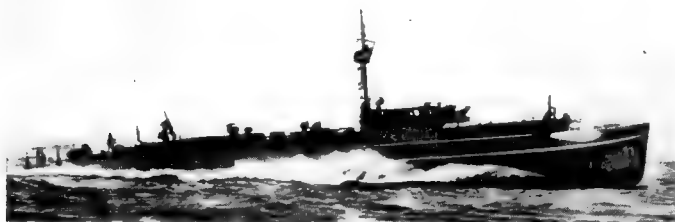
#### 30 Ex-German Type.



Ex-S 50. 1948.  
Ex-S 50, 65, 81, 82, 86, 99, 101, 109, 110, 113, 118, 123, 132, 135, 175, 204, 209, 211, 214, 219, 222, 227, 704, 707, 708, 709

Displacement: 92 tons (113 tons full load)  
Dimensions: 114½ × 16 × 7 feet  
Guns: 1—40 mm. AA., 2—20 mm. AA.  
Tubes: 2—21 inch (4 torpedoes)  
Machinery: Mercedes Diesels. 3 shafts. B.H.P.: 7,500 = 41 kts.  
Oil fuel: 20 tons

Notes.—Launched 1939-44. Wood.

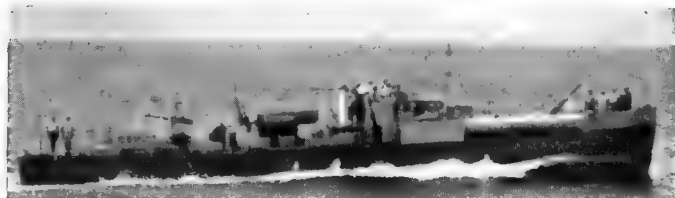


Ex-S 11. Added 1948.

Ex-S 11, 12, 16, 24,  
Displacement: 62 tons (76 tons full load)  
Dimensions: 113 × 14 × 4 feet  
Guns: 1—20 mm. AA., 2 M.G.  
Tubes: 2—21 inch  
Machinery: Benz Diesels. 3 shafts. B.H.P.: 3,960 = 33 kts.  
Oil fuel: 14 tons

Notes.—Launched 1934-39. Wood.

#### 4 Ex-Italian Type.



Added 1952, Lieut. Aldo Foccaroli.

Ex-MS 52 Ex-MS 61 Ex-MS 65 Ex-MS 75

General Note.—Under Italian Peace Treaty, MS 52, 53, 61, 65, 75, MAS 516, 519-21; ME 40; and VAS 245, 246, 248 were all to be ceded to Soviet Navy. VAS 245 delivered 30 June, 1949. MS 52, 61, 65, 75, MAS 516, 519, ME 40 also delivered.

### Motor Torpedo Boats—continued.

#### 205 Ex-U.S. Type.

A 1-205 (ex-PT 85-87, 89, 197, 265-276, 289-294, 400-449, 492-504, 506-508, 510-521, 552-556, 560-563, 625-656, 661-692, 731-760; ex-RPT 1-5, 11; and ex-BPT 53-60). [Of two types as follows:—

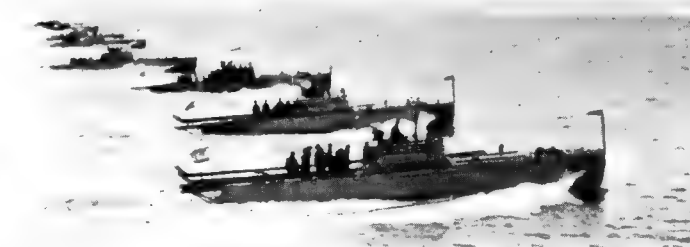
77 boats:  
Displacement: 55 tons  
Guns: 2—20 mm. AA.  
Tubes: 4—21 inch  
Speed: 42 kts.

Notes.—Launched 1942-44. 77 boats ex-American Vosper 70 ft. design.

73 boats:  
Displacement: 44 tons  
Guns: 2—20 mm. AA., 2 M.G.  
Tubes: 2—21 inch  
Speed: 40-44 kts.

Notes.—Launched 1942-44. 73 ex-American built by Elco.

#### Russian Sha 4 Type.



Added 1952, S. F. courtesy M. J. Meister.

Notes.—There are still some units of Italian design, as illustrated above. Machinery also of Italian design. Distributed between Baltic, Black Sea, and Far East. Distinctive numbers are painted on C.T.s.

#### G 5 Type



Added 1940.

Displacement: 17 tons  
Armament: 2 torpedoes  
Speed: 42 kts.

Notes.—Built at Leningrad. Launched 1937.

### Submarine Chasers.

Notes.—Total about 250. Official classification, Morskoye Okhotniki—"Sea Hunters".

#### 36 Ex-U.S. Type.

Ex-RPC 1-16, 30-49

Notes.—Are of U.S. PC type, delivered to Russia under Second World War Lend-Lease terms.

#### 1 Ex-Japanese Type.



1954, Hajime Fukaya

Ex-No. 38.

Displacement: 460 tons  
Dimensions: 167½ (o.a.) × 22 × 9 feet  
Guns: 1—3.1 inch AA., 3—25 mm. AA., 1—13 mm. AA., 36 D.C.  
Machinery: Diesels. 2 shafts. B.H.P.: 1,700 = 16 kts.

Notes.—Former Japanese. Launched 1940. Employed in minesweeping after the war. Delivered to U.S.S.R. at Nakhodka, Oct. 3, 1947.

### Motor Gunboats.

Note.—Among the vessels in the Danube the type of craft most seen is a 30-40 tons motor gunboat with 1 rocket launcher (16 rockets) forward, and 3 light AA. guns aft.



Added 1951.

1125 Type.

Displacement: 42 tons standard  
Dimensions: 82 × 12½ × 3 feet  
Guns: 2—12 pdr. (3 inch), 1 AA. M.G. (6 in some)  
Speed: 25 kts.

Note.—The two twelve-pounders are in tank-type turret (see photo).

## Motor Launches.

### MO 4 Type

Displacement : 56 tons  
Guns : 2—45 mm., 2—13 mm., 1 M.G., D.C.  
Machinery : H.P. : 2,600 = 25 kts.



Added 1954, courtesy M. J. Meister.

There are over 120 armoured motor launches in the Baltic of 8 different types, including the following:—

	Displacement	Dimensions	Guns	Speed
(a)	42 tons	82 × 13 × 2½ feet	2—3 inch, 6 M.G.	28 kts.
(b)	26 "	75½ × 11½ × 1½ "	1—3 inch, 5 M.G.	20 "
(c)	25 "	75½ × 10½ × 2½ "	1—3 inch	16 "
(d)	20 "	68½ × 10½ × 3½ "	2—3 inch	21 "
(e)	18 "	52½ × 10 × 2½ "	1—3 inch	19 "

Notes.—Many others exist, of which the photo above is an example, including vessels of 18, 20, 23, 25, 26, 42, 56, and 61 tons, usually armed with 1 or 2—3 inch guns and varying numbers of M.G. Mostly they are known by numbers, prefixed by various letters, including BK, BM, K, MKM, MO, N, SN, TK, and ZK.



No. 201.

1941, Official.

Nos. 201-212.

Displacement: 30 tons  
Guns: 2—47 mm.  
Speed: 25 kts. or more

Notes.—Motor vessels, similar to Finnish VMV type. Launched: 1937-38.

## Motor Launches—continued.

### 78 "SC" Type.



Ex-SC 1075.

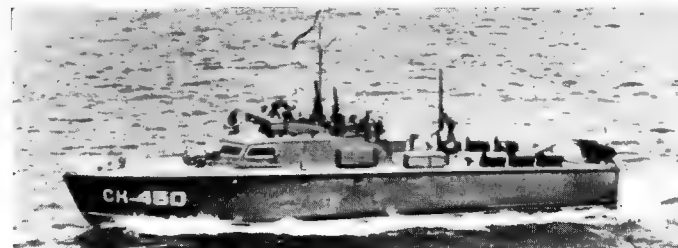
Added 1948.

BO 1-46 (ex-SC 500, 537, 538, 634, 643, 646, 647, 657, 660, 661, 663, 673-675, 685, 687, 713, 719-721, 752, 754, 756, 774, 986, 997, 1007, 1011, 1021, 1031, 1060, 1073-1076, 1283-1287, 1295, 1324, 1364, 1365, 1475-1493, 1496-1499, 1502-1508, 1510-1512, 1517)

Displacement : 95 tons  
Dimensions: 107½ (w.l.), 111 (o.a.) × 17 × 6½ feet  
Guns: 1—40 mm. AA., etc.  
Machinery: 2 sets Diesels. 2 shafts. B.H.P. : 800 = 15 kts.  
Complement: 28

Notes.—BO (Bolshoy Okhotnik) U.S. Navy SC type including BO 315 and BO 328. (Large Cutter).

### 26 "PTC" Type.



SK 450.

1948.

M Series ex-PTC 37-49, 54-66)

Displacement: 24 tons full load  
Dimensions: 59 (w.l.), 63 (o.a.) × 15½ × 3½ (max.) feet  
Guns: 1—20 mm. AA., 2 M.G.  
Machinery: Hall-Scott motors. 2 shafts. S.H.P. : 650 = 28 kts.  
Complement: 10

Notes.—First loaned to Great Britain and subsequently transferred to Russia.

## Coastguard Vessels.

DOSORNI

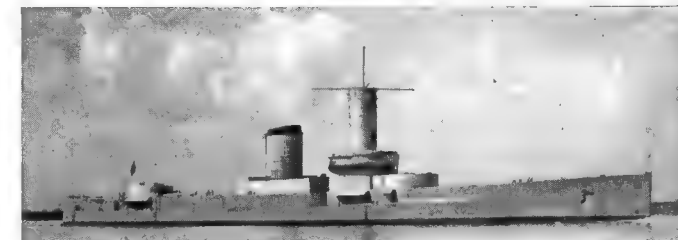
RAZVYEDTCHIK

Displacement: 100 tons standard  
Guns: 1—37 mm. AA.

Notes.—Launched 1904. Still in service in Baltic. Former tenders to Imperial yachts, now serving as coastguard patrol vessels.

## Target Service Ships.

### I Ex-Battleship.



Ex-HESSEN

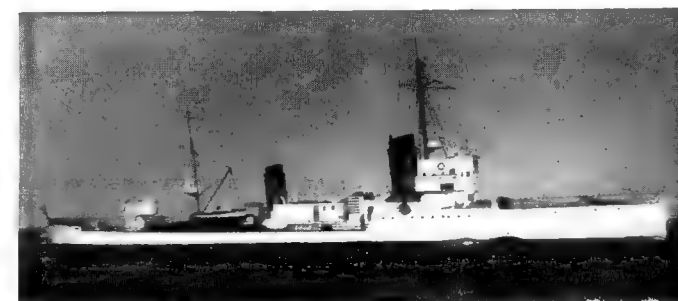
1937, Schafer.

Builders: Germania, Kiel.  
Launched: 18 August, 1903.

Displacement: 13,800 tons  
Dimensions: 419 × 73 × 23½ feet  
Machinery: Triple expansion. I.H.P. : 16,000 = 18 kts.

Notes.—Former German battleship. Reconstructed 1936-37 as a wireless-controlled target ship. Oil fuel and automatically fired boilers of Schultz type. Equipment includes special smoke-screen apparatus.

### I Ex-Torpedo Boat.



1939, Schafer.

VISTREL (ex-Blitz, ex-T 185, ex-V 185)

Builders: Vulkan.  
Launched: 1910.

Displacement: 800 tons  
Machinery: Curtis turbines  
Speed: 20 kts.

Notes.—Former German torpedo boat, used for wireless target control of ex-Hessen.

## "Target Class"

KHORYOK

KUNITZA

LASKA

YDRA

Displacement: 185 tons  
Guns: 1—3 inch, 50 cal., 2 M.G.  
Speed: 12 kts.

Notes.—All built at Petrograd as target towing tugs but subsequently served as patrol vessels. Launched 1914-15. Transferred during Russian civil war 1918-21 through canals and Volga river to Caspian Sea.



RUSSIA—River Monitors and Gunboats

River Monitors.

(Ex-Roumanian Danube Flotilla).

Ex-BUCOVINA (ex-Austro-Hungarian Sava)

Launched :	1915
Displacement :	541 tons
Dimensions :	190½ × 33½ × 4½ feet
Guns :	2—4.7 inch, 45 cal. Skoda (paired in single turret forward) + 2—4.7 inch, 10 cal. howitzers (fortress type, singly mounted in pits with cupola protection), 2—66 mm., (A.A. twin-mounted in turret), 2—47 mm., and 6 M.G.
Armour :	1½" belt and bulkheads, 1" deck, 2" C.T., 2" turret and cupolas.
Machinery :	Triple expansion. I.H.P. : 1,600 = 12 kts.
Boilers :	Yarrow
Oil fuel :	75 tons
Complement :	90 to 100

General Notes.—Built at Budapest under 1914-15 Austro-Hungarian Naval Programme completed 1915. 1—24 inch searchlight. 3 magazines. Interned at Novi Sad, 1919-20, and handed over by Yugo-Slavs at Orsova early in 1921. Named after Roumanian province acquired after the war of 1914-18.

Appearance Notes.—Now has 2 white bands around funnel and flush deck forward.

Ex-BASARABIA (ex-Austro-Hungarian Inn)

Launched :	1915
Displacement :	530 tons
Dimensions :	203½ × (o.a.) × 34½ × 4½ feet
Guns :	2—4.7 inch, 45 cal. + 3—4.7 inch, 10 cal. howitzers, 2—47 mm., 9 M.G.
Armour :	1½" belt and bulkheads, 1" deck, 2" turret and cupolas, 2" C.T.
Machinery :	Triple expansion. I.H.P. : 1,500 = 12 kts.
Boilers :	Yarrow
Oil fuel :	70 tons
Complement :	100

Notes.—Built at Budapest under Austro-Hungarian 1912 Naval Programme ; interned at Novi Sad, 1919-20, and handed over by Yugo-Slavs at Orsova early in 1921. Named after Roumanian province acquired after the war of 1914-18.

Ex-ION C. BRĂTIANU

Launched :	1907
Displacement :	670 tons
Dimensions :	208½ × 33½ × 5½ feet
Guns (Skoda) :	3—4.7 inch, 35 cal., 1—3.5 inch AA., 2—47 mm., 2 M.G.
Armour :	1½" belt, 1" deck, 3"—2" turrets
Machinery :	Triple expansion. I.H.P. : 1,800 = 13 kts.
Coal :	60 tons
Complement :	110

Notes.—Built by Stabilimento Tecnico Triestino, at Trieste, in sections, re-erected at Galatz. Has 1—30.7 inch searchlight. Named after a nineteenth-century Roumanian statesman. Was the heaviest armoured ship on the Danube.

Ex-ARDEAL (ex-Austro-Hungarian Temex)

Launched :	1904
Displacement :	443 tons
Dimensions :	183½ × 31½ × 3½ feet
Guns :	2—4.7 inch, 35 cal., 1—3.5 inch AA., 2—47 mm., 4 M.G.
Armour :	1½" belt, 3" and 1½" turrets, 1½" bulkheads, 1" deck
Machinery :	Triple expansion. I.H.P. : 1,400 = 10 kts.
Fuel capacity :	60 tons
Complement :	80 to 90

General Notes.—Built at Budapest as Austro-Hungarian Temes, and was sunk in October, 1914, but was raised in June, 1916, and entirely rebuilt 1916-17. Re-entered service April 1917. Interned at Novi Sad, 1919-20 ; handed over at Orsova by Yugo-Slavs early in 1921. Named after Roumanian province acquired after the war of 1914-18. Ardeal is the Roumanian name for the province of Transylvania.

Appearance Notes.—Easily identified by her tall, thin funnel and raised gun aft, mounted during reconstruction, 1916-17. No other monitor exists with this arrangement.

River Monitors—continued.

KHAZAN UDARNI and two others

Displacement :	1,900 tons
Dimensions :	238 × 39 × 10 feet
Guns :	4—5.1 inch 4—3 inch, 6—47 mm.
Machinery :	4 sets Diesels. B.H.P. : 3,200 = 15 kts.

Note.—Amur Flotilla. Udarni doubtful.

LENIN (ex-Shtorm)  
SUN-YAT-SEN (ex-Shkval)

Displacement :	965 tons
Dimensions :	242½ × 39½ × 6½ feet
Guns :	2—5.9 inch, 4—4.7 inch, 4—37 mm.
Armour :	4½" turrets
Machinery :	4 sets Diesels. B.H.P. : 3,000 = 15 kts.
Oil fuel :	100 tons
Complement :	104

Notes.—Launched 1910. Amur Flotilla. Two single (5.9) and two twin (4.7) turrets.

S. M. KIROV

Guns :	6—5.9 inch, 1—3 inch, 4—37 mm.
--------	--------------------------------

Note.—Amur Flotilla. Names doubtful.

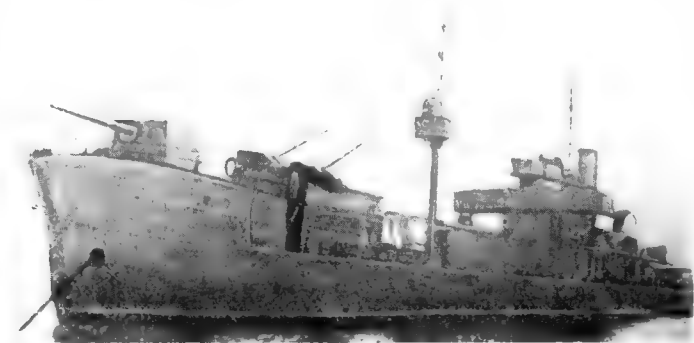
KRASNOVOSTOK (ex-Viyuga)  
CHICHERIN (ex-Vikhr)  
SVERDLOV (ex-Ouragan)

Auxiliary Gunboats.

MOSKVA and 2 others

Displacement :	1,500 tons
Guns :	2—5.1 inch forward, 1—2.75 inch aft

Notes.—Very shallow draught. Laid down 1939-40. Launched 1940. Auxiliary gunboats, German built former dredgers.



KRASNAYA ABKHASIA.

Added 1954, courtesy M. J. Meister.

KRASNAYA ABKHASIA  
KRASNAYA ARMENIA (ex-Krasni Krim)

Displacement :	1,100 tons
Dimensions :	Draught: 3 feet forward, 9 feet aft
Guns :	2 or 3—5.1 inch, 2—3 inch AA., 2—45 mm., 2—13 mm., M.G.
Mines :	248 to 300
Machinery :	Triple expansion. I.H.P. : 640 to 750 = 9 kts.
Oil fuel :	150 tons

Notes.—Launched in 1916. In Black Sea. Though they are fitted for minelaying they are not specially built minelayers, but auxiliary gunboats—converted landing vessels armed with guns during the Russian civil war 1918-22.

KRASNAYA GRUZIA  
KRASNI AJARISTAN

Gunboats.

KRASNI AZARBAIJAN (ex-Trotsky, ex-Ardagan)

Displacement :	700 tons
Dimensions :	203 × 28½ × 9½ feet
Guns :	3—4 inch, 2—45 mm. AA., 2—37 mm. AA., 4 M.G.
Machinery :	Diesel. B.H.P. : 2,200 = 11 kts.
Complement :	126

LENIN (ex-Kars)

Notes.—Launched 1909. Both in Caspian Sea.

River Gunboats.

AKTIVNI

Displacement :	750 tons
Dimensions :	236 × 27 × 5½ feet
Guns :	2—4 inch, 4—45 mm. A.A. 6 M.G.
Machinery :	2 sets Diesels. B.H.P. : 1,600

Note.—Amur Flotilla.

ZHELYEZYAKOV

Displacement :	240 tons
Dimensions :	157½ × 25 × 4½ feet
Guns :	2—4 inch, 3—45 mm. AA., 2—37 mm. AA.
Machinery :	2 sets Diesels. B.H.P. : 300

Note.—Danube Flotilla..



Ex-MONGOL.

Added, 1952, M. J. Meister.

Ex-BIENDOTA (ex-Vogul)  
KRASNIMONGOL (ex-Mongol)  
KRASNIMORYAK (ex-Korel)

Displacement :	190 tons
Dimensions :	164 × 27 × 2 feet
Guns :	2—3 or 4.7 inch, 1—4.8 inch (122 mm.) howitzer, 2 M.G.
Machinery :	H.P. : 500 = 11 kts.
Fuel :	145 tons

Notes.—Launched 1907. Amur Flotilla. If still in service have been renamed. The majority of the river flotilla of the former Manchurian Navy is believed to be in Soviet hands.

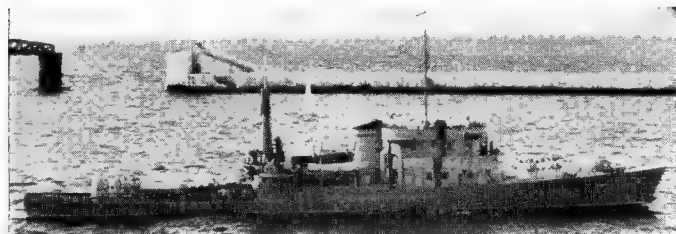
NADEZMNI (ex-Drochanin)

## Aircraft Tenders.

## Ex-FALKE

Builders : Stülkenwerft  
 Launched : 1942  
 Displacement : 2,040 tons  
 Dimensions :  $322\frac{1}{2} \times 46 \times 6\frac{1}{2}$  feet  
 Machinery : 2 shafts. H.P.: 1,800 = 12 kts.

Notes.—Ex-German. Equipped with a catapult. In Baltic.



1948.

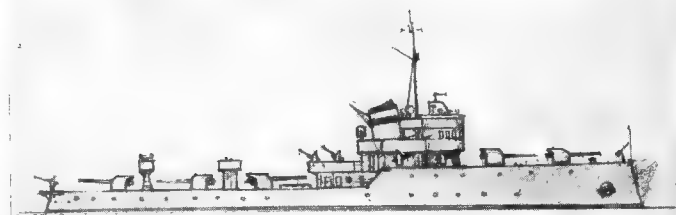
## KODOR (ex-Gunter Pluschow)

Builders : Norderwerft, Hamburg.  
 Completed : 14 Apr., 1935.

Displacement : 375 tons  
 Dimensions :  $176\frac{1}{2} \times 27\frac{1}{2} \times 8\frac{3}{4}$   
 Machinery : Diesels. 2 shafts. B.H.P.: 3,200 = 19 kts.  
 Oil fuel : 50 tons  
 Radius : 4,500 miles at 15 kts.  
 Complement : 30

Notes.—Ex-German aircraft tender acquired and renamed. In Black Sea.

## M.T.B. Tender.



KRASNOYE ZNAMYA.

1949.

## KRASNOYE ZNAMYA (ex-Khrabri)

Launched : 21 Nov. 1895  
 Displacement : 1,740 tons  
 Guns : 5—5.1 inch, 55 cal., 3—45 mm. AA.  
 Armour : 5" belt, 1" deck, 1" C.T.  
 Machinery : Triple expansion. I.H.P.: 2,100 = 14 kts.  
 Oil fuel :  
 Boilers : 6

Notes.—Serving as flagship of Rear-Admiral commanding MTB Flotillas, Baltic. Hull of extremely strong construction. Excellent sea-boat. Represents an extraordinary concentration of power in small man of war. Three times rebuilt and rearmed. Sunk by Finnish MTB in the battle of Lavansaari, Gulf of Finland, autumn 1942, salvaged by Russians, repaired and entirely rebuilt, ram removed, large modern bridgework, light tripod mast, large streamlined funnel added.

## Surveying Vessels.

## OKEAN

Displacement : 1,500 tons  
 Speed : 15 kts.

## SJUD

Displacement : 640 tons  
 Dimensions :  $187 \times 30\frac{1}{2} \times 12$  feet  
 Guns : 2—3 inch, 4—45 mm. AA., 2—13 mm. M.G.  
 Mines : 100  
 Machinery : 2 sets Diesels. 2 shafts. B.H.P.: 600 = 9 kts.  
 Fuel : 50 tons  
 Complement : 100

Notes.—Sma II icebreakers on minelaying or surveying duties. All in White Sea. Nord lost.

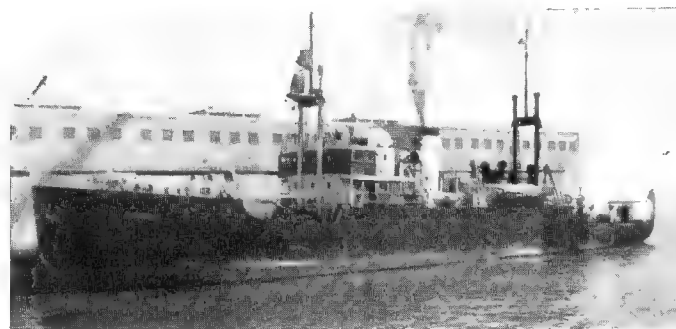
## CHUKCHA

Displacement : 2,700 tons  
 Dimensions :  $246 \times 43\frac{1}{2} \times 14$  feet  
 Guns : 2 M.G.  
 Machinery : Triple expansion. I.H.P.: 900 = 10 kts.  
 Coal : 900 tons  
 Complement : 55

Note.—In White Sea.

## OKHOTSK

## OST



PARTIZAN.

Added 1948, Mr. Matthew Thomlinson

## PARTIZAN

Displacement : 1,300 tons  
 Dimensions :  $210 \times 32\frac{1}{2} \times 11$  feet  
 Guns : 2—4 inch, 2 M.G.  
 Machinery : Triple expansion. I.H.P.: 700 = 9.5 kts.  
 Coal : 400 tons  
 Complement : 80

Notes.—Both launched 1937. In Far East.

## LEBEDJ

Displacement : 1,100 tons  
 Dimensions :  $180\frac{1}{2} \times 29\frac{1}{2} \times 16$  feet  
 Guns : 1—37 mm. AA., 2 M.G.  
 Machinery : Triple expansion. I.H.P.: 680 = 12 kts.

Note.—In White Sea.

## AZIMUT

Displacement : 420 tons  
 Dimensions :  $144\frac{1}{2} \times 28\frac{1}{2} \times 11$  feet  
 Machinery :  
 Speed : 11 kts.

Notes.—Swedish built. Icebreaking bow. Launched 1914.

## GALS

Displacement : 540 tons  
 Dimensions :  $121\frac{1}{2} \times 25 \times 11$  feet  
 Machinery : Triple expansion. I.H.P.: 240 = 8 kts.  
 Coal : 45 tons

## Surveying Vessels—continued.

## BAROGRAF

Displacement : 260 tons  
 Dimensions :  $92 \times 19 \times 12\frac{1}{2}$  feet  
 Machinery : Triple expansion. I.H.P.: 425 = 7.5 kts.  
 Complement : 19

## Ex-MEREPÖEG

Launched : 1937  
 Displacement : 90 tons  
 Speed : 10 kts.

Note.—Ex-Estonian.

## GIDROGRAF (ex-Hydrografs)

Launched : 1918  
 Displacement : 600 tons  
 Speed : 10 kts.

Note.—Ex-Latvian.

## KOMPASS

Launched : 1918  
 Displacement : 415 tons  
 Speed : 7 kts.

Note.—Ex-Estonian.

## EKVATOR (ex-Meteor)

Builders : Kaiserliche Werft, Danzig.  
 Launched : 18 Jan., 1915.

Displacement : 1,200 tons  
 Dimensions :  $219\frac{1}{2} \times 33\frac{1}{2} \times 12\frac{1}{2}$  feet  
 Guns : 1—3.5 inch, 1 M.G.  
 Machinery : 2 sets 8-cyl. 4-stroke Diesels. 2 shafts.  
 B.H.P.: 2,200 = 14.5 kts.

## LOT (ex-Lood)

Launched : 1906  
 Displacement : 265 tons  
 Speed : 9.5 kts.

Note.—Ex-Estonian.

## ZENIT

Note.—Particulars wanted.



Added 1949.

## TREFOLYEV

Launched : 1893  
 Displacement : 1,280 tons  
 Dimensions :  $203 \times 36 \times 14$  feet  
 Guns : 4—3 inch, 50 cal., 4—3 pdr.  
 Machinery : Reciprocating. 1 shaft. I.H.P.: 450 = 9 kts.

Notes.—Ex-training ship. Mainmast and bowsprit removed. In Baltic.

RUSSIA—Landing Craft, etc., Training Ships

Armoured River Gunboat.



Added 1954, courtesy M. J. Meister.

Guns : 1—3 inch, 1—20 mm. AA., 4 M.G.  
Speed : 16.5 kts.

Landing Craft.

**MZ 778**      **MZ 780**      **MZ 781**

Note.—Ceded by Italian Peace Treaty. 778, 781 delivered to Russia, 30 June, 1949.

30 of LCI (LSIL) type      17 of LCT (LCU) type

Notes.—All on loan from U.S.A. (Second World War Lend-lease). Also 54 of LCM type and 2 of LCPV type.

18 ex-German AF

5, 10, 11, 14, 20, 26, 27, 33, 42, 46, 65, 74, 77, 79, 80, 81, 100, 102

Displacement : 150 tons  
Speed : 10.5 kts.

Note.—All launched 1941-44.

2 ex-German F type

1049, 1103

Displacement : 230 tons  
Speed : 11 kts.

Note.—Both launched 1944.

46 ex-German F

108, 109, 112, 114, 166, 169, 187, 188, 204, 208, 214, 220, 221, 225, 226, 223, 239, 240, 246, 258, 265, 267, 268, 269, 271, 286, 287, 319, 384, 385, 390, 391, 400, 425, 457, 490, 571, 600, 606, 821, 840, 867, 875, 876, 921, 973

Displacement : 165 tons  
Speed : 10.5 kts.

Notes.—All launched 1941-44. There are many more captured and refloated ex-German landing craft.

Repair Ships.

**UMBA** (ex-Keret)

Launched: 1910.

Displacement: 1,400 tons  
Dimensions: 195½ (pp.), 200 (o.a.) × 30 × 12 feet  
Guns: 5—54 mm. AA., 2 M.G.  
Machinery: Triple expansion. I.H.P.: 825 = 10 kts.  
Complement: 80

**ELBORUS**

Displacement: 2,600 tons  
Dimensions: 302 × 39 × 13½ feet  
Guns: 2—3 inch, 1—45 mm. AA.  
Machinery: Diesel-electric. H.P.: 2,800 = 13 kts.  
Oil fuel: 180 tons  
Complement: 150

Note.—In Black Sea.

Fishery Protection Vessel.

**VOROVSKY** (ex-Yaroslavna, ex-yacht Lysistrata)

Builders: Denny, Dumbarton.

Launched: 1900.

Displacement: 3,000 tons  
Dimensions: 285 (pp.), 315 (o.a.) × 40 × 18 feet  
Machinery: Triple expansion. 2 shafts. H.P.: 3,500 = 18 kts.  
Guns: 2—4.7 inch, 2—3 pdr., 2 M.G.  
Complement: 100

Note.—In Far East.

Boom Defence Vessels.

**LADOGA**

**ONEGA**

**VIATKA**

Displacement : 530 tons  
Dimensions : 185½ × 30½ × 4½ feet  
Guns : 3—45 mm. AA., 1 M.G.  
Machinery : Triple expansion. I.H.P. : 330 = 18 kts.  
Coal : 10 tons  
Complement : 50  
**LENA** (ex-German Franz E. Schütte, 1939)  
Displacement : 2,042 tons

Training Ships.

**PRAKTIKA** (ex-Passat)

Displacement:

300 tons

**UTCHOBA** (ex-Mousson)

Notes.—3 masts. In Baltic. Sailing vessels for training cadets, boys and volunteers.



1939, Dr. Erich Gröner.

**NYEMAN** (ex-Isar, ex-Puma)

Builders: Bremen-Vulcan.

Launched: 1930.

Displacement: 3,850 tons  
Dimensions: 319 × 45½ × 13 feet  
Machinery: Triple expansion, 2 shafts. I.H.P.: 2,000 = 12 kts.  
Notes.—Converted merchant vessel. Former Depot Ship for submarines. Now Training Ship. In Baltic. Nyeman is the name of a river in Western Russia.

**Ex-CRISTOFORO COLOMBO**, Ex-Z18

Builders: Castellammare.

Launched: 4 Apr., 1928.

Displacement: 2,787 tons  
Dimensions: 218 (pp.) × 48½ × 20½ feet  
Sail area: 18,700 sq. ft.  
Machinery: 2 Tosi Diesels with electric drive to 2 Marelli motors. 2 shafts. H.P.: 1,600 = 10 kts.  
Oil fuel: 103 tons  
Radius: 6,000 miles at 8 kts.

Notes.—Assigned to Soviet Navy by Italian Peace Treaty. Delivered to Russia, Feb. 1949.

Training Ships.—continued.



Added 1948.

**KOMSOMOLYETZ** (ex-Okean)

Builders: Howaldt Dockyard, Kiel.

Launched: 1902.

Displacement: 11,900 tons standard  
Dimensions: 468½ × 55½ × 25 feet  
Machinery: Triple expansion. 2 shafts. I.H.P.: 11,000 = 18 kts.  
Boilers: 4, of different types.  
Complement: 289

Notes.—Training ship for engineers and stokers. In service in Baltic, and still steams.

**AVRORA**

Launched: 1900.

Displacement: 6,500 tons  
Guns: 10—5.1 inch, 55 cal., 4—3 inch AA.

Notes.—Former cruiser. Still in service as training ship for cadets at Kronstadt.

**LENINGRAD SOVYET** (ex-Vyerni)

Launched: 1895.

Displacement: 1,280 tons  
Dimensions: 203 × 36 × 13  
Guns: 4—3 inch, 50 cal., 4—3 pdr.  
Machinery: H.P.: 200 = 9 kts.

Notes.—Sister ship to surveying vessel Trefolyev, but with bigger funnel. Navigational training ship in Baltic.

Tenders.



560.

Ex-508 ex-Delphin, ex-M 108  
Ex-530 ex-Fuchs, ex-M 130

Ex-535 ex-Gazelle, ex-Hela, ex-M 135  
Ex-560 ex-Hecht, ex-Hille, ex-M 60

Displacement : 350 tons (525 tons full load)  
Dimensions : 183½ × 24½ × 7½ feet

Notes.—Launched 1918-19. Delfin built by Tecklenborg, Geestemuude, Fuchs by Reiherstreg, Hamburg, Hille by Seebeck, Geestemuude. Transferred to Russia 1945. Reported ex-Hela renamed Donets.

# Depot Ships.

**PAYSHERD** (ex-Otto Wunche) **V7** (ex-Vajderman Kophamel)

Displacement: 4,730 tons  
Dimensions: 433 × 52½ × 14½ feet  
Guns: 4—4.1 inch, 2—37 mm., 12—20 mm.  
Machinery: 4 diesels, 2 shafts. B.P.H.: 12,400 = 20 kts.

Notes.—Ex-German. Paysherd built by Howaldt, Kiel. Launched 1941.]



1948.

## ANGARA (ex-Hela)

Displacement: 2,300 tons  
Dimensions: 323 × 42½ × 11 feet  
Guns: 2—4.1 inch, 1—37 mm. AA., 2—20 mm. AA.  
Speed: 18 kts.

Note.—In Black Sea.

## SMOLENSK

Displacement: 6,000 tons  
Dimensions: 314½ (pp.), 331 (o.a.) × 46 × 19½ feet  
Machinery: Triple expansion. I.H.P.: 1,500 = 11 kts.  
Coal: 625 tons  
Complement: 130

Note.—In Far East.



1946, London Studio.

## TEREK (ex-Elbe)

Displacement: 1,600 tons  
Dimensions: 189 × 27½ × 10½ feet  
Guns: 1—3.5 inch, etc.  
Machinery: 2 sets Linke-Hofmann-Busch 6-cyl. 4-stroke Diesels.  
2 shafts. B.H.P.: 1,600 = 15 kts.  
Complement: 45

Notes.—Ex-German. In Black Sea.

# Depot Ships—continued.

## SMOLNY

Displacement: 4,800 tons standard  
Dimensions: 331½ × 45½ × 12½ feet  
Guns: 5—45 mm. AA.  
Machinery: Reciprocating engines  
Speed: 12 kts.

Notes.—Submarine mother ship. In Baltic.



(ex-Weichsel, ex-Syra).

Displacement: 3,974 tons  
Dimensions: 309½ × 44 × 13½ feet  
Guns: 4—20 mm. AA.  
Machinery: Triple expansion. I.H.P.: 1,400 = 10.5 kts.  
Boilers: 2 watertube  
Coal: 425 tons  
Complement: 135

Notes.—Depot ship for submarines. In Baltic

## IRTYSH (ex-Kronstadt)

Displacement: 5,800 tons  
Dimensions: 328 × 46 × 19½ feet  
Guns: 4—3 inch, 3—45 mm. AA., 2 M.G.  
Machinery: Triple expansion. I.H.P.: 1,500 = 12 kts.  
Coal: 430 tons  
Complement: 240

Note.—Parent ship for submarines in the Baltic.



## Ex-ADOLF LÜDERITZ

Displacement: 3,615 tons  
Dimensions: 374 × 47½ × 14 feet  
Guns: 4—4.1 inch, 2—37 mm., 12—20 mm.  
Machinery: 4 diesels. B.H.P.: 12,400 = 20 kts.

Notes.—Was employed by Germans as depot ship for motor torpedo boats. M.T.B. parent ship. In Baltic.

# Depot Ships—continued.

## VOLGA (ex-Juan Sebastian Eleano, ex—)

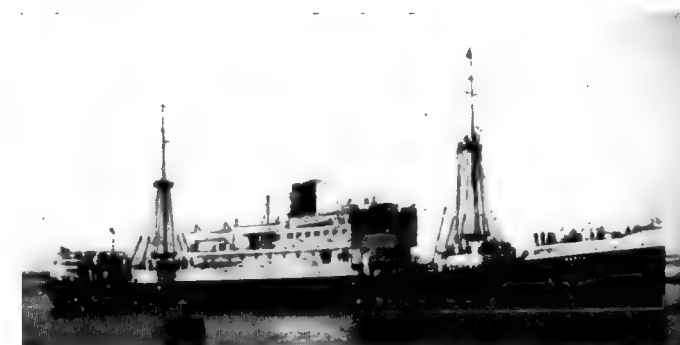
Displacement: 9,300 tons  
Dimensions: 459 × 56 × 21½ feet  
Guns: 2—3 inch, 3—45 mm. AA., 5 M.G.  
Machinery: Parsons turbines, 2 shafts. S.H.P.: 5,500 = 14 kts.  
Oil fuel: 1,090 tons  
Complement: 260

Notes.—In Black Sea. Russian name as merchant ship not known, but probably immediately incorporated in Russian Navy.

## NEVA (ex-Essequibo)

Displacement: 13,300 tons  
Dimensions: 450½ (pp.), 466 (o.a.) × 57½ × 24½ feet  
Guns: 3—3 inch, 6—45 mm. AA., 8 M.G.  
Machinery: Quadruple expansion. I.H.P.: 5,800 = 15 kts.  
Oil fuel: 960 tons  
Complement: 340

Note.—In Baltic.



SIBIR (before conversion).

Added 1951, courtesy M. J. Meister.

## SIBIR

Measurement: 3,767 tons gross  
Dimensions: 493½ × 56 × — feet  
Guns: 6—45 mm. AA., 4 M.G.  
Machinery: Triple expansion. 2 shafts. I.H.P.: 3,300 = 12 kts.

Notes.—Converted Russian merchant vessel. Depot ship for M.T.B.s and coastal craft.

## PRIMORIE (ex-Hai Yen, ex-Bulgo, ex-Signal)

Displacement: 4,000 tons  
Dimensions: 262½ × 36 × 14½ feet  
Guns: 3—3 inch, 3—45 mm. AA., 2 M.G.  
Machinery: Triple expansion. I.H.P.: 940 = 9 kts.  
Coal: 400 tons  
Complement: 60

Note.—In Black Sea.

## DESNA

Note.—In Black Sea.

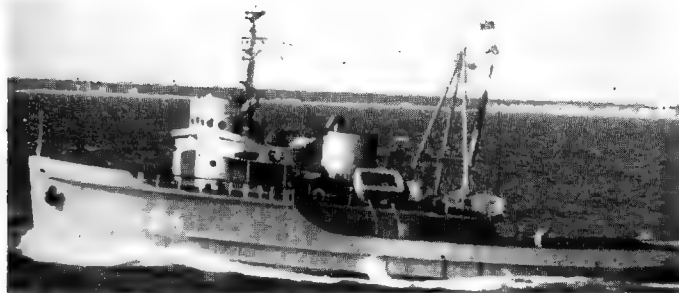
## POLYARNAYA ZVIEZDA

Displacement: 5,000 tons  
Dimensions: 349 × 46 × 17½ feet  
Guns: 3—3 inch, 3—45 mm. AA., 2 M.G.  
Machinery: M.A.N. Diesels. 2 shafts. B.H.P.: 1,200 = 10 kts.  
Oil fuel: 225 tons

Notes.—Re-engined 1936. Ex-Imperial Yacht, rebuilt 1936-37. Parent ship to submarines in Baltic.

RUSSIA—Salvage Vessels, Fleet Oilers, Transports, etc.

Salvage Vessels.



MB 24.

1953.

MB 24 and others

Builders : Livingstone Shipbuilding Co., Orange, Texas, U.S.A.  
Launched : 1944

Displacement : 835 tons  
Dimensions : 134½ (w.l.), 143 (o.a.) × 34 × 15½ feet  
Guns : 1—3 inch d.p., 2—20 mm. AA.  
Machinery : 2 B.M. diesels, 2 electric motors, 2 shafts. B.H.P.: 1,875 — 14 kts  
Oil fuel : 187 tons  
Complement : 34

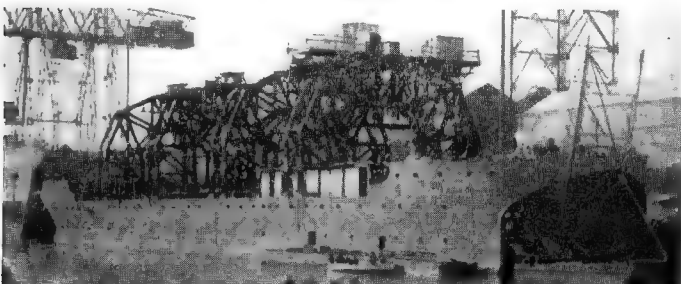
Note.—Ex-United States ATAs (Ocean Rescue Tugs). In Baltic.

SIGNAL

Launched: 1936.

Displacement: 680 tons  
Speed: 14 kts.

Notes.—Fitted with powerful pumps and other apparatus for salvage. In Baltic.



KOMMUNA.

Added 1952, A.K., courtesy M. J. Meister.

KOMMUNA (ex-Volkhov)

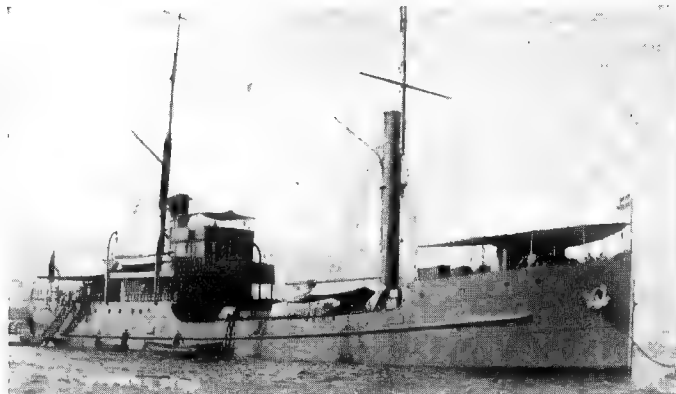
Launched: 1913.

Displacement: 2,400 tons  
Machinery: Diesels. 2 shafts

Notes.—Old submarine salvage vessel. Double hull. After having been out of commission for many years, towed to Vlissingen by Russian tugs, 26th May, 1950, to be refitted and modernised at De Schelde Yard, Flushing, Netherlands. Towed back to Russia July 1951.

Fleet Oilers.

No. 2



Ex-STIGE

Launched: 1924.

Displacement: 1,343 tons  
Dimensions: 173½ × 30½ × 13 feet  
Guns: 1—4.7 inch, 1—3 inch AA.  
Machinery: Tosi Diesel. B.H.P.: 650 — 7 kts.

Notes.—Petrol Carrier. Built La Spezia.

SMYENA

Note.—Petrol carrier. In Baltic.



Added 1951, courtesy M. J. Meister.

Ex-KÄRNTEN

Measurement : 5,660 tons gross  
Guns : 1—4.1 inch, 4—20 mm. AA.  
Speed : 12 kts.

Note.—Ex-German oiler, now in Russian Navy.



Ex-HAYASAKI

Added 1953, Hajime Fukaya.

Displacement: 950 tons.  
Measurement: 2,166 tons gross  
Dimensions: 190½ (p.p.), 194½ (w.l.), 204½ (o.a.) × 30½ × 10½ feet.  
Guns: 1—3.1 inch, 2—25 mm., 2—13 mm. AA.  
Machinery: 2 diesel, 8 H.P.: 1,600 — 15 kts.

Notes.—First Japanese refrigerating ship.

Fleet Oilers—continued.

GROSNEFT

Note.—In Black Sea.

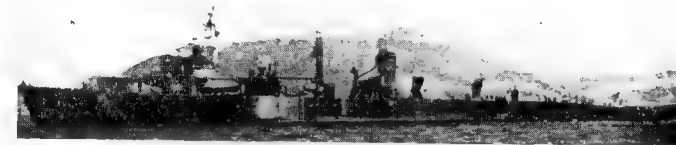
Displacement: 7,000 tons

ERIVAN

Note.—In Far East.

Displacement: 3,500 tons

Transports.

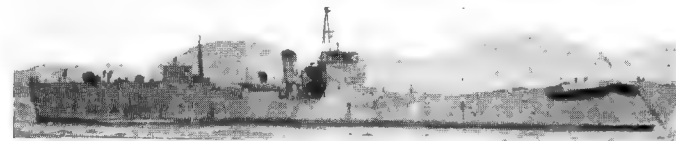


1948.

Ex-No. 13

Displacement: 1,800 tons  
Dimensions: 315 (o.a.) × 33½ × 12 feet  
Guns: 2—5.1 inch, 26—25 mm. AA., 5 M.G., 42 D.C.  
Machinery: Turbine. S.H.P.: 9,500 = 22 kts.  
Boilers: 2

Notes.—Former Japanese. Cargo capacity 500 tons for landing 480 marines.



1948.

Ex-No. 137

Displacement: 1,129 tons  
Dimensions: 264 (o.a.) × 30 × 10½ feet  
Guns: 1—3.9 inch, 21—25 mm. AA., 12 D.C.  
Machinery: Turbine. S.H.P.: 2,500 = 16 kts.

Notes.—Former Japanese. Cargo capacity, 218 tons, plus 674 tons fuel. Accommodation for 120 marines.

Ex-MONTECUCCO (ex-KT 32)

Launched: Dec. 19, 1942.

Measurement: 834.4 tons gross  
Dimensions: 221½ × 39½ × 9 feet  
Machinery: Triple expansion. 2 shafts. I.H.P.: 2,200 = 12 kts.  
Coal: 160 tons

Notes.—Former Italian. Built by Ansaldo. Ceded under Peace Treaty. Delivered to Russia, 23 May, 1949.

Water Carriers.

VODOLEI II

Builders: Sandvikens.

Launched: 1905.

Displacement: 660 tons  
Speed: 9.5 kts.

VODOLEI I

Launched: 1907.

Displacement: 730 tons  
Speed: 9.5 kts.

Ex-BASENTO

Ex-ISTRIA

Ex-LIRI

Ex-POLCEVERA

Note.—Small water carriers ceded under Italian Peace Treaty.



## Icebreakers.

## New Construction.

**KAPITAN BYELOUSOV    KAPITAN MELECHOV    KAPITAN VORONIN**

Displacement : 5,360 tons  
 Dimensions :  $272\frac{1}{2} \times 62\frac{1}{2} \times 20\frac{1}{2}$  feet  
 Machinery : Diesel-electric. B.H.P. : 10,500 = 16.5 kts.  
 Oil fuel : 740 tons

Notes.—*Kapitan Byelousov* was launched by Hietalahden Laivatelakka, Helsinki, end of 1953 and completed Sep. 1954. Other two ships building by Sandvikens Skeppsdocka, Helsinki. The ships have four screws, two forward under the forefoot, and two aft. Majority of following icebreakers are immensely strong in framing and scantlings, with exceptionally thick plating, and decks strengthened to permit guns being mounted in war-time. In addition to the vessels below, there are a large number of smaller icebreakers of insufficient importance to warrant their inclusion here.

**ILYA MUROMYETS (ex-German Eisbar)**

Builders : Eriksberg, Gothenborg.  
 Launched : 1941.  
 Displacement : 1,350 tons  
 Dimensions :  $180\frac{1}{2} \times 49 \times 21\frac{1}{2}$  feet  
 Speed : 15 kts.

**ALYOSHA POPOVITCH (ex-German Eisvogel)**

Launched : 1941  
 Displacement : 1,559 tons

Note.—In White Sea.



VYATCHESLAV MOLOTOV.

1948.

**LAZAR KAGANOVICH MIKOYAN (ex-Otto Schmidt)**

Displacement : 11,000 tons (4,866 tons gross)  
 Dimensions :  $335\frac{1}{2}$  (pp.),  $351$  (o.a.)  $\times 75\frac{1}{2} \times 22$  feet  
 Machinery : 3 sets triple expansion, with Diesel-electric propulsion for cruising speeds, 3 shafts. H.P. : 10,050 = 15.5 kts.  
 Boilers : 9  
 Coal : 4,000 tons  
 Complement : 142

Notes.—3 aircraft and 1 catapult are said to have been included in design, though not apparent in above photo. All in White Sea.

Name	Builders	Launched
Lazar Kaganovich	Baltic Works, Leningrad	30 Apr., 1937
Mikoyan	Nikolaiev	1938
Vyatcheslav Molotov	Baltic Works, Leningrad	8 Mar., 1939
Yosif Stalin	Baltic Works, Leningrad	14 Aug., 1937

**SEVMORPUTI**

Launched : May, 1937.

Displacement : 6,000 tons  
 Speed : 11.5 kts.

Note.—Built at Leningrad.

## Icebreakers—continued.

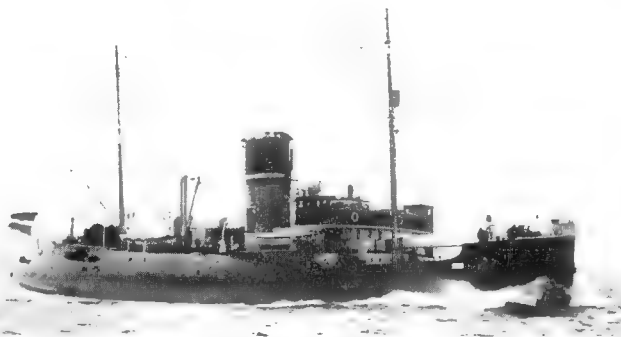


1954, courtesy P. Bronsveld.

**SIBIRIAKOV (ex-Jaakarhu)**

Builders : Smit, Rotterdam.  
 Launched : 1926  
 Displacement : 4,825 tons  
 Dimensions :  $246 \times 63 \times 21$  feet  
 Machinery : Triple expansion. 3 shafts. I.H.P. : 9,200 = 15 kts.  
 Boilers : 8. Oil fuel

Notes.—Formerly Finnish. Appropriated by Russia, Baltic.



1939, Official.

**EX-KRISJANS VALDEMARAS**

Builders : Beardmore.  
 Launched : 1925  
 Displacement : 2,800 tons (1,932 tons gross)  
 Dimensions :  $196\frac{1}{2} \times 55\frac{1}{2} \times 22$  feet  
 Machinery : Triple expansion. I.H.P. : 5,200 = 15 kts.  
 Coal : 350 tons  
 Complement : 55

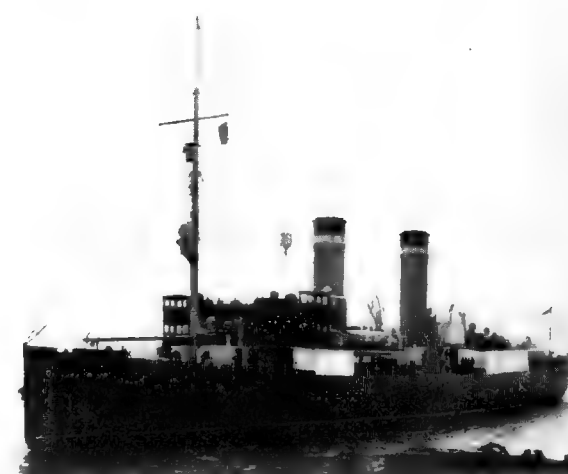
Notes.—Renamed now. Formerly a Latvian ship.

**KRASSIN (ex-Sviatogor)**

Builders : Armstrong.  
 Launched : 1917  
 Displacement : 9,300 tons (4,902 tons gross)  
 Dimensions :  $297$  (w.l.),  $323\frac{1}{2}$  (o.a.)  $\times 71 \times 26$  feet  
 Machinery : 3 sets triple expansion. 3 shafts. I.H.P. : 10,000 = 15 kts.  
 Boilers : 10 single-ended  
 Coal : 3,200 tons  
 Complement : 190

Note.—In Baltic.

## Icebreakers—continued.

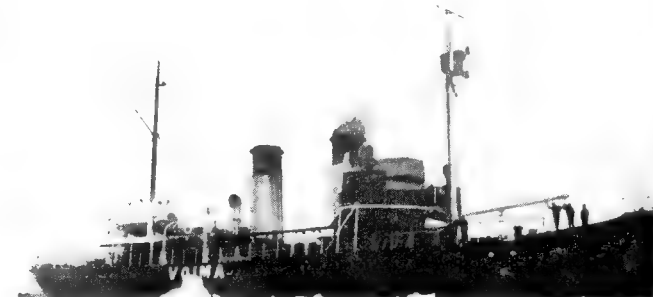


1949, Keith P. Lewis.

**LENIN (ex-Aleksandr Nevski)**

Builders : Armstrong.  
 Launched : 1917  
 Displacement : 6,260 tons (3,928 tons gross)  
 Dimensions :  $273$  (w.l.),  $281$  (o.a.)  $\times 64 \times 19$  (mean),  $20\frac{1}{2}$  (max.) feet  
 Machinery : 3 sets triple expansion. 3 shafts. I.H.P. : 8,000 = 19 kts.  
 Boilers : 8  
 Coal : 1,200 tons  
 Complement : 122

Notes.—This ship was refitted on the Mersey, 1946-47. In Baltic.



1940, Official.

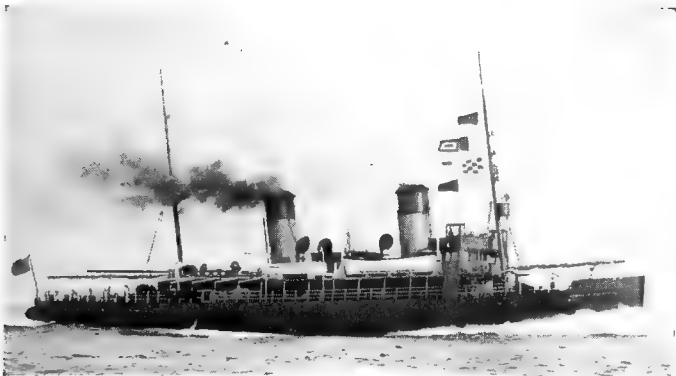
**MALYGIN (ex-Volma)**

Builders : Sandvikens.  
 Launched : 1917  
 Displacement : 2,070 tons  
 Dimensions :  $210\frac{1}{2} \times 46\frac{1}{2} \times 16\frac{1}{2}$  feet  
 Machinery : Triple expansion. 1 shaft. I.H.P. : 4,100 = 13.5 kts.

Notes.—Ex-Finnish. In Baltic.

RUSSIA—Icebreakers, Fleet Tugs

Icebreakers—continued.



**DOBRINYA NIKITICH**  
Builders: Swan, Hunter.  
Launched: 1916.  
Displacement: 2,460 tons standard (1,664 tons gross)  
Dimensions: 200 (pp.), 211 (o.a.) × 50½ × 20 feet  
Machinery: Triple expansion. 2 shafts. I.H.P.: 4,000 = 14 kts.  
Boilers: 6  
Coal: 370 tons

Note.—In Far East.

**STEPAN MAKAROV** (ex-Kniaz Pajarski)  
Builders: Swan, Hunter.  
Launched: 1916.  
Displacement: 3,150 tons standard (2,156 tons gross)  
Dimensions: 236 (pp.), 248 (o.a.) × 57 × 22 feet  
Machinery: 3 sets triple expansion. 3 shafts. I.H.P.: 6,400 = 14.5 kts.  
Boilers: 6  
Coal: 700 tons

Note.—In Black Sea.



**VOLYNETZ** (ex-Suur Töll, ex-Vainamoinen, ex-Volynetz, ex-Tsar Mikhail Feodorovitch)  
Launched: 1914.  
Displacement: 4,000 tons  
Dimensions: 236½ × 57 × 18½ feet  
Machinery: 3 sets triple expansion. 3 shafts. I.H.P.: 5,800 = 13.5 kts.  
Coal: 800 tons

Notes.—Ex-Estonian. In Baltic.

Icebreakers—continued.



Added 1938, courtesy Messrs. Swan, Hunter.

**SADKO** (ex-Lintrose)  
Builders: Swan, Hunter.  
Launched: 1913.  
Displacement: 2,000 tons (1,613 tons gross)  
Dimensions: 255 × 37½ × 21 feet  
Machinery: Triple expansion. I.H.P.: 3,500 = 14 kts.  
Boilers: 4

Notes.—Transferred from Canadian Government service, 1915. This ship was sunk during First World War off the Arctic coast of Russia, where she lay for many years until raised and refitted. In White Sea.

**FEODOR LITKE** (ex-Kanada, ex-Earl Grey)  
Builders: Vickers.  
Launched: 1909.  
Displacement: 3,400 tons (2,216 tons gross)  
Dimensions: 250 (pp.), 265 (o.a.) × 48 × 17½ (mean), 22½ (max.) feet  
Machinery: Triple expansion. 2 shafts. I.H.P.: 6,000 = 17 kts.

Notes.—Transferred from Canadian Govt. Service, 1915. Refitted on the Mersey, 1947-48. In White Sea.

**GEORGEI SYEDOV** (ex-Beothic) **VLADIMIR RUSSANOV** (ex-Bonaventure)  
Displacement: 3,217 tons (1,383-1,588 tons gross)  
Dimensions: 240½ × 36 × 16½ feet  
Machinery: Triple expansion. I.H.P.: 3,000 = 13.5 kts.  
Coal: 500 tons

Notes.—Built 1909, by D. & W. Henderson & Co. and by Napier & Miller, respectively. Both purchased in 1915. White Sea. In 1939 Georgei Syedov achieved a record latitude in her ice-bound drift northward.

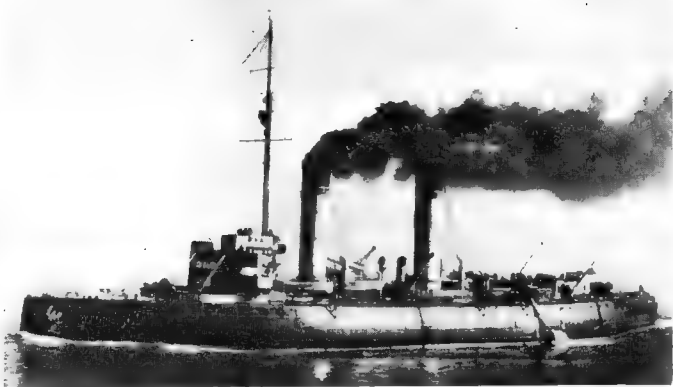
**TAIMYR**  
Launched: 1909.  
Displacement: 1,290 tons  
Speed: 10.5 kts.

Note.—In White Sea.

**MONTCALM**  
Builders: Napier & Miller.  
Launched: 1904.  
Displacement: 3,270 tons (1,432 tons gross)  
Dimensions: 245 × 40½ × 15½ feet  
Machinery: 2 sets triple expansion. 2 shafts. I.H.P.: 3,225 = 14 kts.  
Boilers: 4 Babcock & Wilcox  
Coal: 425 tons

Notes.—Transferred from Canadian Govt. Service, 1942. In Far East.

Icebreakers—continued.



Added 1948.

**YERMAK**  
Builders: Armstrong.  
Launched: 1898.  
Displacement: 8,800 tons (4,955 tons gross)  
Dimensions: 305 (pp.), 320 (o.a.) × 71½ × 25 (mean), 28 (max.) feet  
Machinery: 3 sets triple expansion. 3 shafts aft and 1 forward. I.H.P.: 9,500 = 14 kts.  
Boilers: 10 S.E.  
Coal: 2,100 tons  
Complement: 112

Notes.—Name of the conqueror of Siberia. Refitted at Antwerp, 1949-50. In Baltic.

**DAVIDOV** (ex-Krasni Oktiabr, ex-Nadejini)  
Builders: Burmeister & Wain.  
Launched: 1897.  
Displacement: 1,525 tons (1,212 tons gross)  
Dimensions: 184 × 43 × — feet  
Machinery: Compound. I.H.P.: 2,200 = 13 kts

Fleet Tugs.

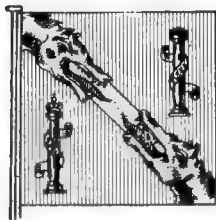


CHF 18. 1946, London Studio.

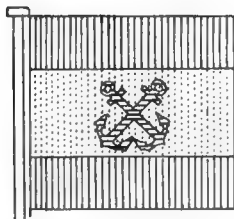
**CHF 1-19**  
Notes.—Letters painted on bows in photo are initial letters of "Tchernomorski Flot" meaning "Black Sea Fleet".  
**MOROZ**  
General Note.—Under the Peace Treaty with Italy, 8 large tugs, Vigorosa, Capo d'Istria, Lampedusa, Rapallo, Porto Adriano, San Angelo, Talamone and Tifeo, were to be ceded.

## SPANISH NAVY

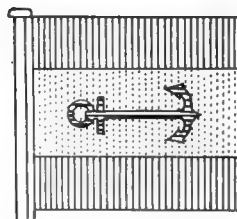
## Flags.



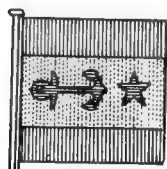
CHIEF OF STATE.



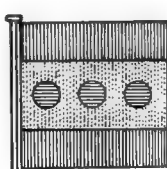
MINISTER OF MARINE.



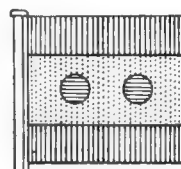
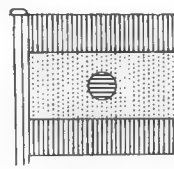
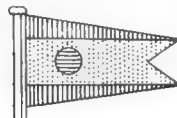
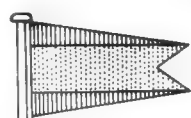
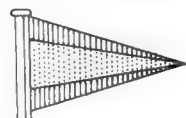
ADMIRAL OF THE FLEET.



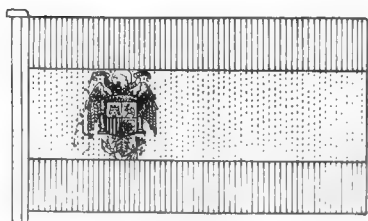
CHIEF OF NAVAL STAFF.



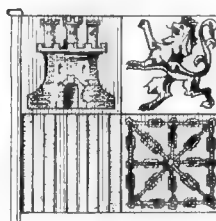
ADMIRAL.

VICE-ADMIRAL  
IN COMMAND.REAR-ADMIRAL  
IN COMMAND.CAPTAIN IN COMMAND  
OF A DIVISION.COMMANDER OR  
LIEUT.-COMMANDER IN  
COMMAND OF A  
DIVISION.

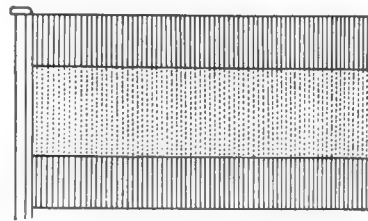
SENIOR OFFICER.



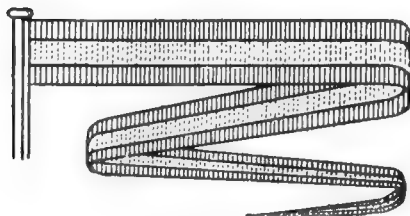
ENSIGN.



JACK.



MERCANTILE FLAG.



PENDANT.



RED.



YELLOW.



BLUE.

## Uniforms.

Capitán-General  
de la ArmadaAdmiral of  
the Fleet.

Almirante

Admiral.

Vice-  
Almirante.Vice-  
Admiral.Contra  
Almirante.Rear-  
Admiral.Capitán  
de Navio.

Captain.

Capitán  
de Fragata.

Commander.

Capitán  
de Corbeta.Lieutenant-  
Commander.Teniente  
de Navio.

Lieutenannt.

Alférez  
de Navio.

Sub-Lieut.

Alférez  
de Fragata.

Midshipman.

(The rank of Admiral of the Fleet is held only by the Caudillo, General Franco.)

The wide band of lace on sleeves of uniforms of Spanish Flag Officers is of a special wavy type of embroidery. Non-executive branches *without a curl* have distinguishing colours as follows :

Engineers, green  
Constructors, blue  
Surgeons, red  
Ordnance, black

Accountant and Supply Officers, white  
Astronomical, sage  
Pharmacists, yellow  
Juridical, purple.

## Administration.

Minister of Marine : Admiral Excmo. Sr. Don Salvador Moreno y Fernández.

Chief of Naval Staff : Admiral Excmo. Sr. Don Juan Pastor Tomasetti.

Commander-in-Chief of the Fleet : Vice-Admiral Excmo Sr. Don Benigno González-Aller y Acebal.

Commander-in-Chief, Cadiz : Admiral Excmo Sr. Don Guillermo Diaz del Rio y Pita da Veiga.

Naval Attaché, London : Captain Don Jesús Fontán Lobé.

## Navy Estimates.

1951 : 146,942,375 pesetas.

1953 : 1,352,837,785.95 pesetas.

1952 : 1,352,837,785.95 pesetas.

1954-55 : 1,453,326,174.65 pesetas.

## Personnel.

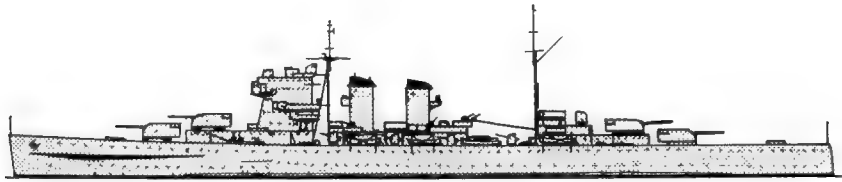
39,000 officers and ratings, including marines.

## Training Establishments.

For Executive Officers and Engineering Branch, Naval School (*Escuela Naval Militar*), Marin, Galicia.  
For Petty Officers, San Fernando.

## Mercantile Marine.

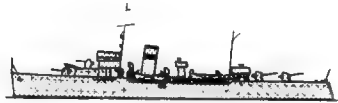
Lloyd's Register appendix, 1954 : 1,146 vessels of 1,274,448 tons gross.



CANARIAS.



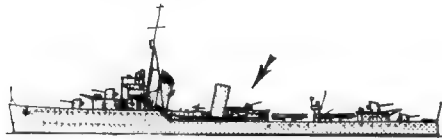
CHURRUCA *Group.*



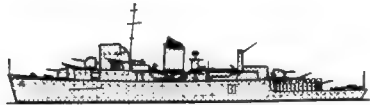
CANOVAS DEL CASTILLO.



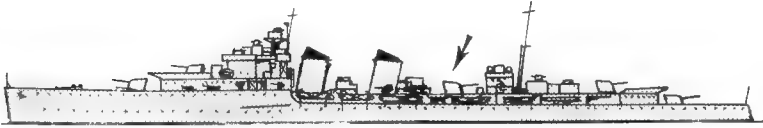
GALICIA, MIGUEL DE CERVANTES.



ALMIRANTE ANTEQUERA *Group.*



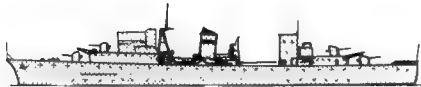
EOLO, TRITON.



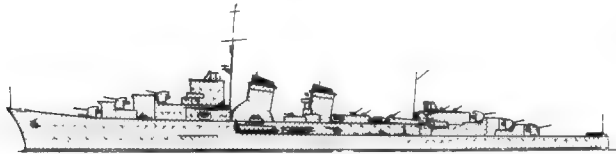
ALMIRANTE CERVERA.



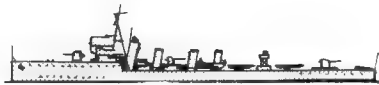
ALAVA, LINIERS.



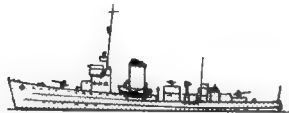
JUPITER *Class.*



MENDEZ NUÑEZ.



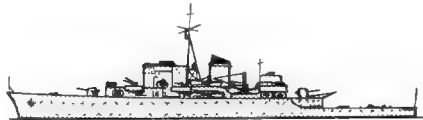
ALSEDO, VELASCO, LAZAGA.



BIDASOA *Class.*



NAVARRA.



PIZARRO *Class.*



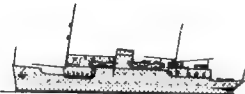
JUAN DE LA COSA.



AUDAZ *Class*



CALVO SOTELO.



MALASPINA, TOFIÑO.

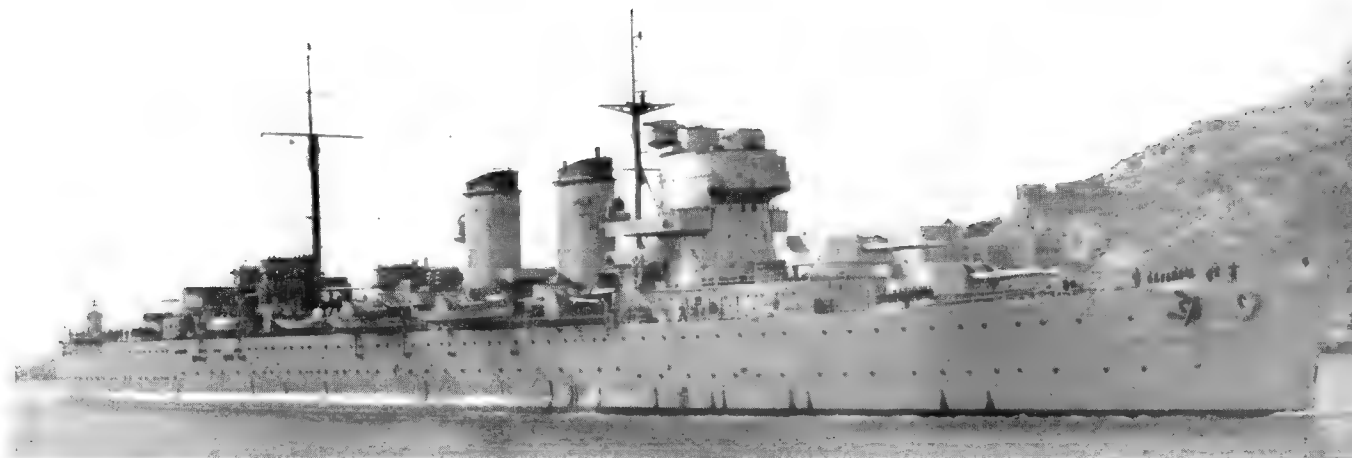
## Heavy Cruiser.

(Rated as *Crucero de Primera Clase*).

## CANARIAS

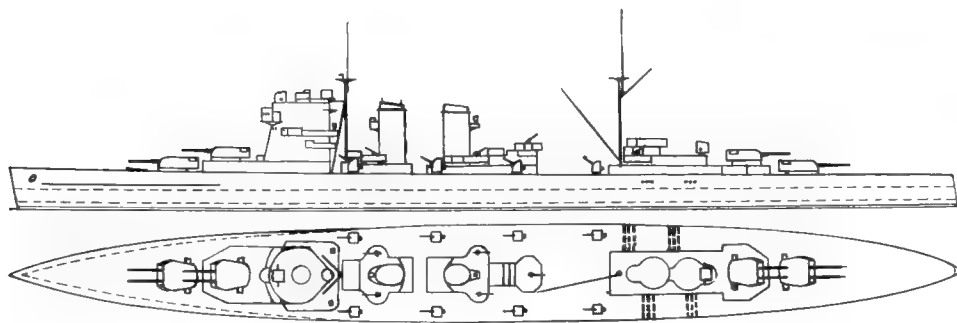
Builders : Sociedad Espanol de Construccion Naval, Ferrol  
 Laid down : 15 Aug. 1928  
 Launched : 28 May, 1931.  
 Completed : Sept., 1936.

Displacement : 10,670 tons standard (12,230 tons full load)  
 Dimensions : Length : 636 feet. Beam : 64 feet. Draught : 17½ feet (mean)  
 Guns : 8—8 inch, 50 cal., 8—4.7 inch AA., 45 cal., 4—40 mm. AA.,  
                   3—20 mm. AA.  
 Tubes : 12—21 inch above water (tripled)  
 Armour : 1½"—2" side, 1" turrets, 4" magazines  
 Machinery : Parsons geared turbines. 2 shafts. Designed S.H.P. : 90,000  
                   = 33 kts.  
 Boilers : 8 Yarrow  
 Oil fuel : 2,794 tons  
 Radius : 8,000 miles at 15 kts.  
 Complement : 1,042



CANARIAS (after reconstruction with separate funnels).

1953, courtesy Senor A. Aguilera.



*General Notes.*—Designed by Sir Philip Watts. Named after Canary Islands. From completion until 1952 this ship had trunked funnels but on completion of refit early in 1953 she emerged with two separate funnels, this being a reversion to the original design which had never been carried out.

*Gunnery Note.*—Maximum elevation of 8-inch guns is 70 degrees.



CANARIAS.

1953, Spanish Navy, Official.



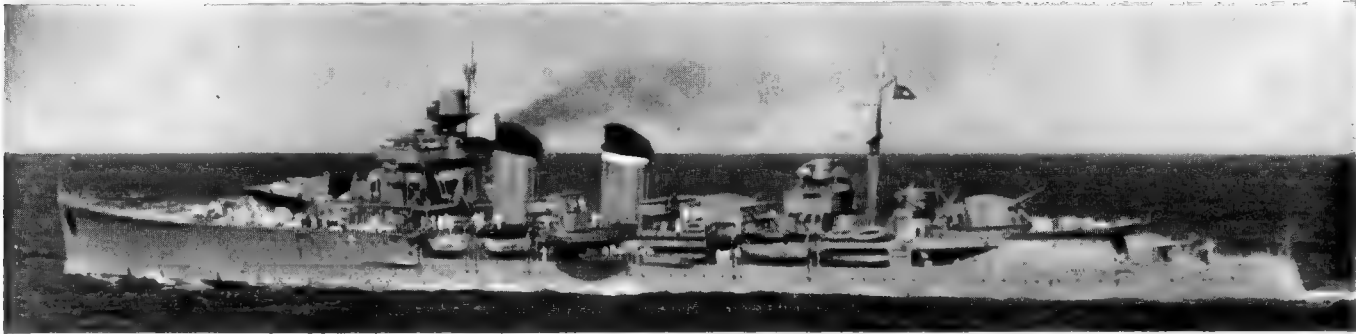
3 "Galicia" Class.

ALMIRANTE CERVERA

GALICIA (ex-Libertad, ex-Principe Alfonso)

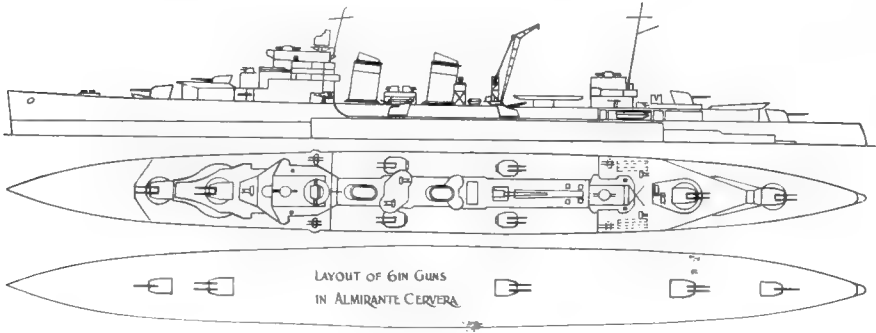
MIGUEL DE CERVANTES

Displacement : 7,457 tons standard, (9,385 tons full load)  
Dimensions : Length : 575 (dp.), 579½ (o.a.) feet. Beam : 54 feet. Draught : 16½ (mean), 20½ (deep load) feet  
Guns : 8—6 inch, 50 cal.; 8—3.5 inch AA. (Almirante Cervera 4—4.1 inch AA.), 8—37 mm. AA., 20—20 mm. AA.  
Tubes : 6—21 inch (tripled), (Almirante Cervera 12)  
Armour : 3" side (admidships), 2" side (forward), 1½" side (aft), 1" deck  
Machinery : Parsons geared turbines. 4 shafts. Designed S.H.P. : 80,000  
Boilers : 8 Yarrow (large tube)  
Oil fuel : 500 tons normal, 1,700 tons max.  
Radius : 5,000 miles at 15 kts., 1,200 miles at full power  
Complement : 564



ALMIRANTE CERVERA.

1951 Spanish Navy, Official



LAYOUT OF 6 IN GUNS  
IN ALMIRANTE CERVERA

General Notes.—Laid down by S.E.C.N. at Ferrol D.Y., under Navy Law of Feb. 17, 1915. Cost estimated at about 8,122 pesetas per ton. Respective names are those of the Commander-in-Chief of the Spanish fleet in the West Indies during the war with the U.S.A. in 1898, Admiral Pascal Cervera y Topete; the north-western province of Spain; and the author of Don Quixote. Designed under direction of late Sir Phillip Watts, K.C.B., for Spanish Government. Reconstructed and modernised during 1940-46. Torpedo tubes are in revolving mounts on upper deck.

Engineering Notes.—On trials Galicia developed 83,000 S.H.P. and attained a speed of 34.7 kts.

Appearance Notes.—Galicia now mounts a radar scanner just abaft the main director on the bridge on a small lattice tower.

Name	Builder	Engineers	Laid down	Launched	Completed
Almirante Cervera	Ferrol D.Y.	S.E.C.N.	25 Nov., 1922	16 Oct., 1925	May, 1927
Galicia			Aug., 1922	3 Jan., 1925	Dec., 1925
Miguel de Cervantes			Apr., 1926	19 May, 1928	1931



MIGUEL DE CERVANTES.

1954, Wright & Logan.



GALICIA.

1952, Spanish Navy, Official.

# Anti-Aircraft Cruiser.

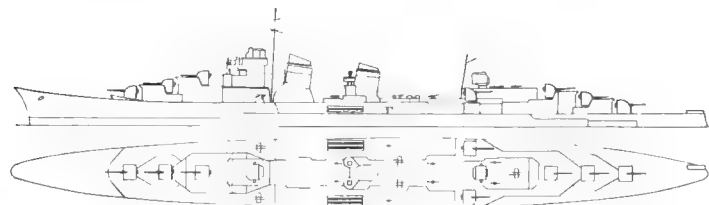


1952, Spanish Navy, Official.

## MENDIZ NUÑEZ

Builders : Ferrol Dockyard  
 Engineers : Sociedad Español de Construcción Nava  
 Laid down : 28 Sep., 1917  
 Launched : 3 Mar., 1923  
 Completed : 1924

Displacement : 4,500 tons standard (6,140 tons full load)  
 Dimensions : Length : 440 (pp.), 462 (o.a.) feet. Beam : 46 feet. Draught : 14½ (mean), 19 (max.) feet  
 Guns : 8—4.7 inch AA., 10—37 mm. AA., 8—20 mm. AA.  
 Tubes : 6—21 inch (tripled)  
 Armour : 1"–½" side (amidships), 1"–½" side (ends), 1" deck  
 Machinery : Parsons geared turbines, 4 shafts. Designed H.P. : 45,000 = 29 kts  
 Boilers : 12 Yarrow (6 oil-burning, 6 mixed-firing)  
 Fuel : 806 tons coal : 727 tons oil.  
 Radius : 5,000 miles at 13 kts.  
 Complement : 370

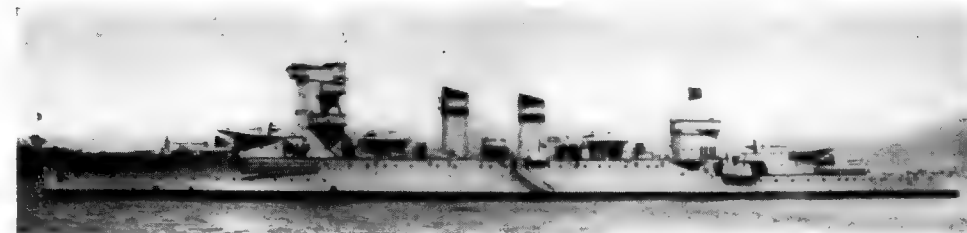


**General Notes.**—Rebuilt and rearmed, 1944-47, funnels being reduced in number from 3 to 2 and appearance entirely altered.

**Historical Note.**—Named after Don Casto Mendiz Nuñez, Commander-in-Chief of the Spanish Fleet in the Pacific in 1866. He bombarded Valparaiso on March 31 of that year, but was repulsed with a wound at Callao on May 2.

**Engineering Notes.**—On trials reached 29.28 kts. with 43,776 S.H.P.

# Light Cruiser.

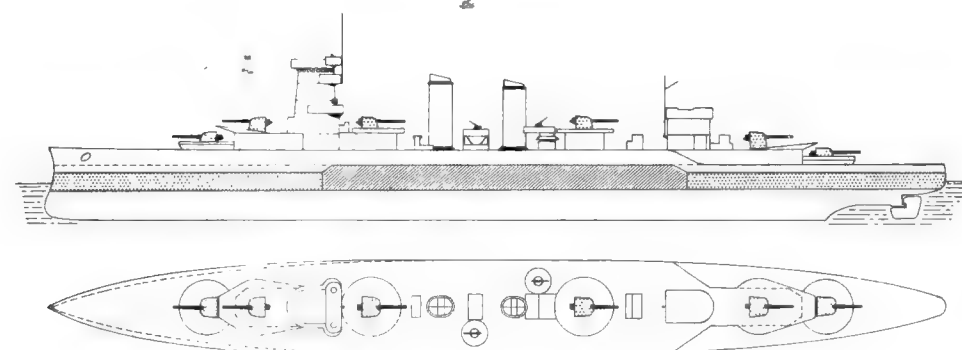


1953, Official.

## NAVARRA (ex-Republica, ex-Reina Victoria Eugenia)

Builders : Ferrol Dockyard  
 Engineers : Sociedad Español de Construcción Nava  
 Laid down : Mar. 1915  
 Launched : 21 Apr., 1920  
 Completed : 15 Jan., 1923

Displacement : 4,857 tons standard (6,348 tons full load)  
 Dimensions : Length : 440 (pp.), 462 (o.a.) feet. Beam : 50 feet. Draught : 15½ (mean), 21½ (max.) feet  
 Guns (Vickers) : 6—6 inch, 50 cal 4—3.5 inch AA., 4—20 mm. AA.  
 Armour : 3" side, 2½"–1½" ends, 3" deck, 6" conning tower. (Nickel and H.T.)  
 Machinery : Parsons turbines, 2 shafts. Designed H.P. : 25,000 = 25.5 kts.  
 Boilers : 8 Yarrow  
 Oil fuel : 1,200 tons  
 Radius : 4,500 miles at 15 kts.  
 Complement : 404



**General Notes.**—Ordered Aug. 1914. Built under Navy Law of July 30, 1914, and named after the ancient kingdom of Navarre. Refitted and reboilered at Cadiz, 1937-38, changes involved being reduction of funnels from 3 to 2, removal of 3 guns of main armament, new bridgework and masts. Now in reserve, having been officially deleted from the effective list.

**Gunnery Notes.**—6-inch are Vickers models, built at La Carraca.

**Engineering Notes.**—On first trials averaged 26.019 S.H.P. = 25.77 kts. for eight hours and 28,337 S.H.P. = 26.9 kts. for four hours.

## N—Destroyers

### Destroyers (Destructoros).

#### 3 "Oquendo" Class.

##### BLAS DE LEZO

Displacement :  
Dimensions :  
Guns :  
Tubes :  
Machinery :  
Boilers :  
Oil fuel :  
Radius of action :  
Complement :

##### OQUENDO

1,943 tons (2,680 tons full load)  
382 × 36 × 12 (mean) feet  
6—4.7 inch AA. (twin mounts), 8—37 mm. AA., 4—20 mm. AA.  
7—21 inch, 2 D.C.T.  
Geared turbines of Rateau-Bretagne type. 2 shafts. S.H.P. : 60,000 = 39 kts.  
3, of 3-drum type  
659 tons  
5,000 miles at 20 kts.  
267

##### ROGER DE LAURIA

**General Notes.**—All ordered at Ferrol, 1947-48. *Roger de Lauria* laid down 4 Sept., 1951. The "Oquendo" class have now been reduced to three ships only. *Blasco de Garay*, *Bonifaz*, *Gelmirez*, *Langara*, *Marqués de la Ensenada*, and *Recalde* will not now be built, having been cancelled in 1953.

**Historical Notes.**—Don Blas de Lezo (1687-1741) lost a leg at the Battle of Malaga, an eye in the siege of Toulon, and an arm during the second siege of Barcelona. He died after repulsing Admiral Vernon's attack on Cartagena. Admiral Don Miguel de Oquendo was one of Medina-Sidonia's principal flag officers in the Great Armada; his son, Antonio de Oquendo (1577-1639), defeated the Dutch off Pernambuco in 1633, but lost his life in action against Tromp in the Downs six years afterwards. Lauria (1250-1305) expelled the French from Sicily and defeated the Turks at sea.

#### 2 "Alava" Class.



ALAVA.

1952, Spanish Navy, Official

##### ALAVA

##### LINIERS

Displacement : 1,635 tons (2,086 tons full load)  
Dimensions : 332 × 31½ × 15 (mean) feet  
Guns : 4—4.7 inch, 6—37 mm. AA., 3—20 mm. AA.  
Tubes : 6—21 inch (tripled)  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 44,000 = 36 kts.  
Boilers : 4 Yarrow, of 3-drum type.

**General Notes.**—These two destroyers, a development of the *Churrucá* design, were originally ordered in 1936, but construction was held up by the Civil War. After being resumed, it was again suspended in 1940, restarted once more at Cartagena, 1944.

**Historical Notes.**—Don Miguel Ricardo de Alava (1771-1843), originally a naval officer, fought against the French at the Battle of Vitoria, and rose to the rank of General. Don Santiago de Liniers (1756-1810) defended Buenos Aires against British attack in 1807, and subsequently became Governor of that province. He then supported the cause of Ferdinand VII against the usurpation of Joseph Buonaparte, and was executed in consequence.

No.	Name	Builders	Laid down	Launched	Completed
23	Alava	Cartagena	21 Dec., 1944	19 Jun., 1947	1950
21	Liniers	Cartagena	1 Jan 1945	1 May 1946	27 Jan., 1951

### Destroyers—continued.

#### 9 "Audaz" Class.



AUDAZ.

1952, Spanish Navy, Official.

##### ARIETE AUDAZ FUROR

##### INTREPIDO METEORO (ex-Atrevido) OSADO

##### RAYO RELAMPAGO TEMERARIO

Displacement : 1,100 tons (1,475 tons full load)  
Dimensions : 305 × 30½ × 10 (mean) feet  
Guns : 3—4 inch, 4—37 mm. AA., 4—20 mm. AA. 2 D.C.T.  
Tubes : 6—21 inch (tripled)  
Machinery : Rateau-Bretagne geared turbines. 2 shafts. S.H.P. : 28,000 = 33 kts  
Boilers : 3, of 3-drum type  
Oil fuel : 290 tons  
Radius : 3,800 miles at 14 kts.  
Complement : 145

**Notes.**—All built at Ferrol. Meanings of names : *Ariete*, battering ram ; *Audaz*, audacious ; *Furor*, fury ; *Intrepido*, fearless ; *Osado*, daring ; *Rayo*, thunderbolt ; *Relampago*, lightning flash ; *Temerario*, venturesome. *Audaz* laid down 26 Sep., 1945, launched 24 Jan. 1951. Five laid down 3 Aug. 1945. *Intrepido*, *Relampago* and *Temerario* begun later. *Meteoro*, *Osado* and *Rayo* all launched 4 Sept. 1951.

#### 3 "Alsedo" Class.



ALSEDO.

1952, Spanish Navy, Official.

##### ALSEDO

##### LAZAGA

##### VELASCO

Displacement : 1,044 tons normal (1,315 tons full load)  
Dimensions : 275 (pp.), 283 (o.a.) × 27 × 15 (max.) feet  
Guns : 3—4 inch, 45 cal., 4—37 mm. AA., 2 D.C.T.  
Tubes : 4—21 inch in 2 twin deck mountings  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 33,000 = 34 kts.  
Boilers : 4 Yarrow  
Oil fuel : 272 tons  
Radius : 2,500 miles at 15 kts  
Complement : 86

**General Notes.**—All laid down at Cartagena June, 1920, launched 26 Oct. 1922 (*Alsedo*), 1923 (*Velasco*) and March 1924 (*Lazaga*). Completed 1924 (*Alsedo*), Aug. 1925 (*Lazaga*). Provided under Law of 1915. *Lazaga* was originally known as *Juan Lazaga*.

**Historical Notes.**—Don Francisco Alsedo y Bustamente was killed while commanding the *Montanes* at Trafalgar. Don Luis Vicente de Velasco lost his life in the defence of the Morro Castle against the British at Havana, 1762. Captain Juan Lazaga was killed while commanding the cruiser *Oquendo* at the Battle of Santiago, 1898.

# Destroyers—continued.

## 13 "Churruca" Class.



JOSÉ LUIS DIEZ.

1951, Spanish Navy, Official.

### First Group (6) ALCALÁ GALIANO ALMIRANTE VALDÉS CHURRUCA

Displacement : 1,536 tons standard (2,086 tons full load)  
Dimensions : 320 (pp.), 333 (o.a.) × 31½ × 17 (max.) feet  
Guns : 4—4.7 inch, 3—37 mm. AA., 2—20 mm. AA., 4 D.C.T. (All Second Group and Almirante Valdés also have 1—3 inch and 4—37 mm.)  
Tubes : 6—21 inch (tripled)  
Machinery : 2 sets Parsons geared turbines. 2 shafts. S.H.P. : 42,000 = 36 kts  
Boilers : 4, of 3-drum type  
Oil fuel : 540 tons  
Radius : 4,500 miles at 14 kts.  
Complement : 175

**General Notes.**—All built at Cartagena by S.E. de C.N. Two earlier ships of this class, originally named *Alcalá Galiano* and *Churruca*, were sold to Argentina, 1927, new units bearing same names being built to replace them. *Almirante Juan Ferrandiz* and *Ciscar*, sunk in Civil War, Sept., 1936 and Oct., 1937, respectively, but latter ship was salvaged and refitted in 1938-39. *Churruca* torpedoed by submarine, but repaired. Now have numbers instead of initials painted on bows, see photo of *Gravina* and table below.

**Historical Notes.**—Admiral Don Federico Gravina died of wounds received at Trafalgar, where he commanded the Spanish fleet. Rear-Admiral Don Antonio Escaño was his chief of staff. Commodore Galiano commanded the *Bahama*, Don Cosme Churruca the *San Juan Nepomuceno*, and Don Cayetano Valdés, the *Neptuno*, in the same battle. Don Antonio de Ulloa (1716-95) was a flag officer who served with distinction in S. America, and became Governor of Louisiana in 1764. Don Jorge Juan y Santacilia (1713-73) was a celebrated naval architect and scientist. Lepanto was the victory gained over the Turks by the Spanish and Italian fleets under Don Juan de Austria in 1571.

No.	Name	Launched	Completed	No.	Name	Launched	Completed
34	Alcalá Galiano	12 Apr., 1930	1931	13	Almirante Antequera	29 Dec., 1930	1934
42	Almirante Valdés	8 Sep., 1930	1932	31	Almirante Miranda	20 June, 1931	1934
33	Churruca	June, 1929	1931	41	Ciscar	26 Oct., 1933	1936
12	José Luis Díez	25 Aug., 1926	1929	24	Escaño	28 Jun., 1932	1935
32	Lepanto	7 Nov., 1929	1930	22	Gravina	24 Dec., 1931	1934
11	Sanchez Barcaiztegui	24 Jul., 1926	1928	14	Jorge Juan	28 Mar., 1933	1936
				43	Ulloa	24 Jul., 1932	1936



GRAVINA.

1953, courtesy Señor A. Aguilera



SANCHEZ BARCAIZTEGUI.

1951 Spanish Navy, Official.



ALMIRANTE ANTEQUERA.

1951, Spanish Navy, Official.

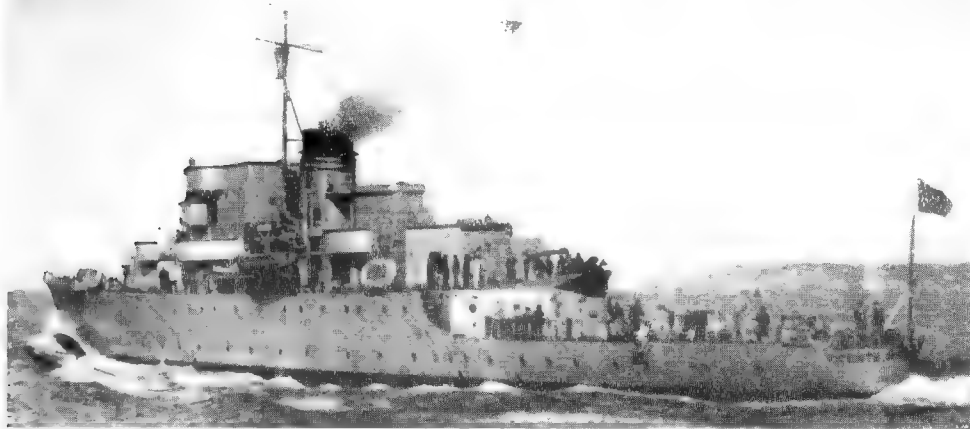
SPAIN—Frigates

Frigates (rated as *Canoneros*).  
8 "Pizarro" Class.



LEGAZPI.

1954, courtesy Señor A. Aguilera.



VICENTE YAÑEZ PINZON

Added 1953, courtesy Señor A. Aguilera.

HERNAN CORTES  
LEGAZPI  
MAGALLANES

MARTIN ALONSO PINZON  
PIZARRO

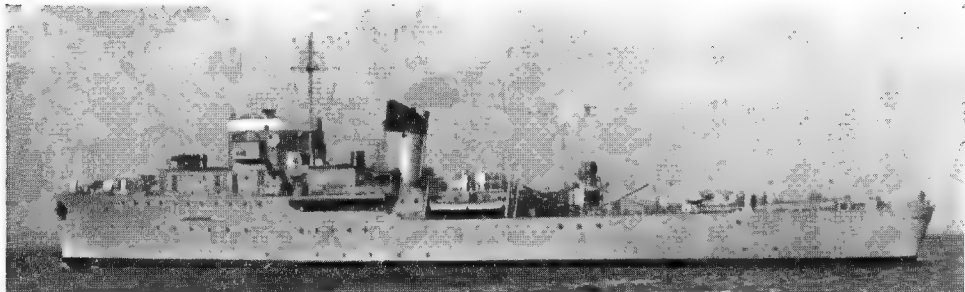
SARMIENTO DE GAMBOA  
VASCO NUÑEZ DE BALBOA  
VICENTE YAÑEZ PINZON

Displacement: 1,710 tons (2,246 tons full load)  
Dimensions: 279 (pp.), 312½ (o.a.) × 39½ × 11 feet  
Guns: 6—4-7 inch AA. (twin mounts), 8—37 mm. AA., 6—20 mm. AA., 2 D.C.T.  
Machinery: 2 sets Parsons geared turbines. 2 shafts. S.H.P.: 5,000 = 18.5 kts.  
Boilers: 2 Yarrow  
Oil fuel: 386 tons normal, 402 tons max.  
Radius: 3,000 miles at 14 kts.  
Complement: 250

General Notes.—All built at Ferrol and commissioned for service on dates shown below. Designed to carry 30 mines. Now have numbers painted on sides (see photo of Legazpi).

No.	Name	Launched	Completed	No.	Name	Launched	Completed
18	Hernan Cortes	3 Aug., 1944	18 Sep., 1947	36	Pizarro	3 Aug., 1944	9 Aug., 1946
27	Legazpi	8 Aug., 1944	8 Aug., 1951		Sarmiento de Gamboa	8 Aug., 1944	2 May, 1950
26	Magallanes	8 Aug., 1944	20 Dec., 1948		Vasco Nuñez de Balboa	3 Aug., 1944	15 Mar., 1947
37	Martin Alonso Pinzon	3 Aug., 1944	18 Mar., 1948	19	Vicente Yañez Pinzon	3 Aug., 1944	5 Aug., 1949

Frigates—continued.

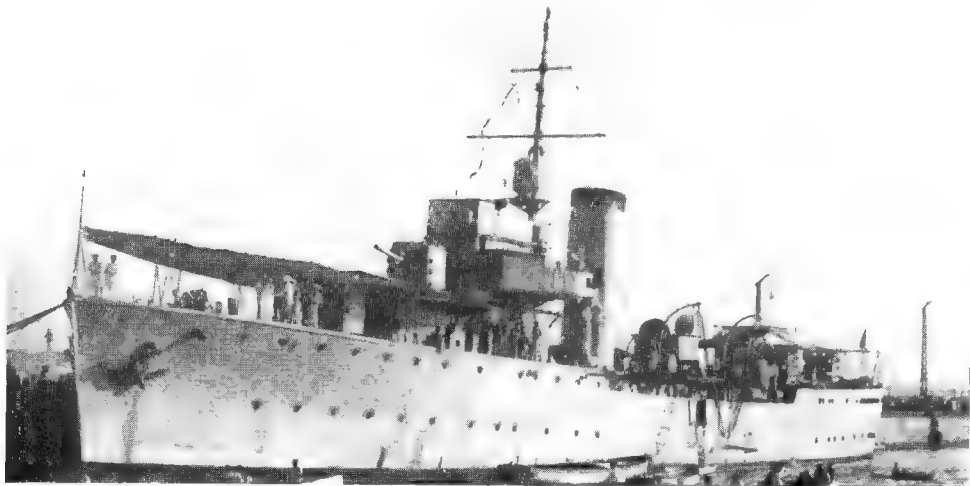


1951, Spanish Navy, Official.

CALVO SOTELO (ex-Zacatecas)

Displacement: 1,600 tons  
Dimensions: 282 (pp.), 303 (o.a.) × 40 × 10 eet  
Guns: 2—4 inch, 2—3 inch AA., 3—20 mm. AA.  
Machinery: Parsons geared turbines. 2 shafts. S.H.P.: 6,500 = 20 kts.  
Boilers: 2 Yarrow  
Oil fuel: 138 tons  
Radius: 3,000 miles at 15 kts.

Note.—This ship was completing for the Mexican Navy in 1936, when she was acquired by the Spanish Government.



1954, courtesy Señor A. Aguilera.

CANOVAS DEL CASTILLO

Displacement: 1,000 tons (1,314 tons full oad)  
Dimensions: 236½ (pp), 251½ (o.a.) × 33½ × 11½ feet  
Guns: 4—4-1 inch, 2—3 inch AA., 3—20 mm. AA.  
Machinery: 2 sets triple expansion. 2 shafts. I.H.P.: 1,700 = 15 kts.  
Boilers: 2 Yarrow  
Fuel: 324 tons coal or oil  
Radius: 6,500 miles at 10.5 kts.  
Complement: 141

Notes.—Provided for by Law of Feb. 17, 1915, and ordered Jan., 1920. Originally named *Antonio Canovas del Castillo*, but name subsequently shortened. Sister ship *Canalejas* broken up for scrap 1955. Data discarded 1954.

Name	Builders	Launched	Completed
Calvo Sotelo	Echevarrieta y Larrinaga, Cadiz	27 Aug. 1934	1936
Canovas del Castillo	S.E.C.N., Cartagena	21 Jan. 1922	1923



Corvettes. (*Corbetas*).

New Construction.



1951, Spanish Navy, Official.

ATREVIDA  
DESCUBIERTADIANA  
FAVORITANAUTILUS  
PRINCESA

Displacement : 880 tons (1,000 tons full load)  
 Dimensions : 242½ (o.a.) × 39½ × 8½ feet (depth 17 feet)  
 Guns : 1—4.1 inch AA., 2—37 mm. (twin mount), 12—20 mm. (quadruple mounts)  
 A/S Weapons : 4 D.C.T.  
 Machinery : Diesels  
 Speed : 18.5 kts.

Notes.—Construction begun June 1950 (first two) and 1951 at Cartagena, except *Diana* and *Nautilus*, at Cadiz. *Atrevida* launched 1953.

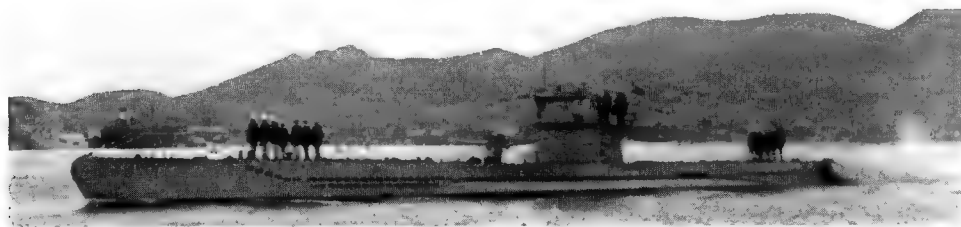
Submarines (*Submarinos*).

New Construction.

G 1	G	G 3	G 4
		Displacement :	760 tons
		Dimensions :	200 × 20 × 14½ feet
		Guns :	1—3.5 inch AA., 1—20 mm. AA.
		Tubes :	5—21 inch
		Speed :	17.5 kts. (surface), 8 kts. (submerged)

Notes.—Four ordered 1945. Under construction at Cartagena. Reported to be generally similar to G 7.

Ex-German Type.



1952, Spanish Navy, Official.

G 7 (ex-U 573.)

Builders : Blohm &amp; Voss, Hamburg

Displacement : 757 tons (surface), 857 tons (submerged)  
 Dimensions : 228½ × 20½ × 14½ feet  
 Guns : 1—3.5 inch  
 Tubes : 5—21 inch (4 bow, 1 stern)  
 Machinery : B.H.P. : 3,000 (Diesels) = 17.9 kts. (surface), H.P. 750 (Electric motors) = 8.5 kts. (submerged)  
 Radius : 9,000 miles (surface)  
 Complement : 45

Notes.—Built in Germany. Interned in Spain in 1942 and purchased the following year.

## Submarines—continued.

3 “D” Class.



D 3.

1954, Spanish Navy, Official



D 2

1952 Spanish Navy, Official

D 1

D 2

D 3

Displacement :	1,065 tons (surface), 1,370 tons (submerged)
Dimensions :	275½ × 21½ × 13½ feet (mean)
Guns :	1—4.7 inch, 2 M.G.
Tubes :	6—21 inch (4 bow, 2 stern)
Machinery :	2 Sulzer Diesels. B.H.P. : 5,000 = 20.5 kts. (surface) ; Electric motors. : H.P. 1,300 = 9.5 kts (submerged)
Radius :	9,000 miles (surface)
Complement :	60

Notes.—Admiralty type. Diving limit, 50 fathoms. D 3 under construction, on trials early 1953.

Name	Builders	Launched	Completed
D 1	Cartagena	11 May, 1944	18 Mar. 1947
D 2		21 Dec., 1944	April 1951
D 3		20 Feb. 1952	1953

2 “General” Class.



1951, Spanish Navy, Official.

GENERAL SANJURJO.

GENERAL MOLA (ex-Evangelista Torricelli)

GENERAL SANJURJO (ex-Archimede)

Displacement :	1,004 tons (surface), 1,259 tons (submerged)
Dimensions :	231½ × 22½ × 16 feet
Guns :	2—3.9 inch
Tubes :	8—21 inch (4 bow, 4 stern)
Machinery :	B.H.P. : 3,000 (Tosi Diesels), = 16 kts. (surface), H.P. 1,400 (Electric motors) = 8 kts. (submerged)
Radius :	7,000 miles (surface)
Complement :	55

Notes.—Both built by Franco-Tosi, Italy. Launched 27 May 1934 and 10 Dec. 1933, respectively. Purchased from Italy in 1933.

SPAIN—Minelayers and Minesweepers

Minelayers (Minadores).

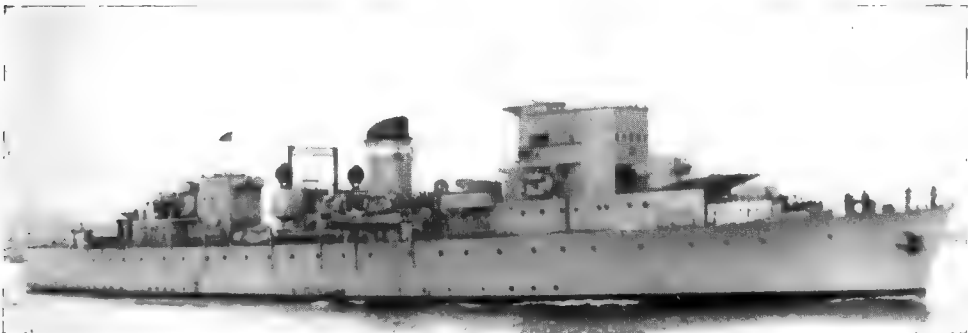


EOLO. 1952, Spanish Navy, Official.

EOLO		TRITÓN	
Displacement:		1,500 tons	
Dimensions:		278 × 38½ × 10 feet	
Guns:		4—4.1 inch, 4—37 mm. AA., 4 M.G.	
Mines:		Stowage for 70 (Triton, 180 to 200)	
Machinery:		Parsons geared turbines. 2 shafts. S.H.P. : 5,000 = 19.5 kts	
Boilers:		2 Yarrow	
Oil fuel:		300 tons	

Notes.—Design resembles Mexican "Queretaro" type. Dual purpose gunboats and minelayers.

No.	Name	Builders	Launched	Completed
28	Eolo	S.E. de C.N., Ferrol	30 Aug., 1939	July, 1942
29	Triton		Feb. 1940	1942



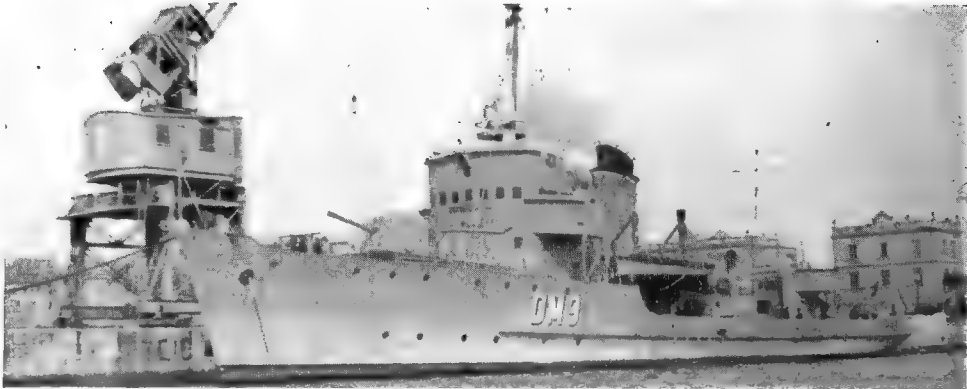
JUPITER. 1954, courtesy Señor A. Aguilera.

JUPITER	MARTE	NEPTUNO	VULCANO
Displacement		2,000 tons	
Dimensions:		302½ (pp.), 315 (o.a.) × 41½ × 11½ feet	
Guns:		4—4.7 inch, 2—3 inch AA., 3—37 mm. AA., 2—20 mm. AA., 2 D.C.T.	
Mines:		Stowage for 264 max., normally less	
Machinery:		2 sets Parsons geared turbines. 2 shafts. S.H.P. : 5,000 = 18.5 kts.	
Boilers:		Yarrow	
Oil fuel:		280 tons	
Complement:		123	

Note.—Multi-purpose gunboats or frigates and cruising type minelayers.

Pendant Nos.	Name	Builders	Launched	Completed
16	Jupiter	S.E. de C.N., Ferrol.	14 Sep., 1935	1937
39	Marte		19 Jun., 1936	1937
17	Neptuno		19 Dec., 1937	1938
38	Vulcano		18 Oct. 1935	1937

Minesweepers (Dragaminas).



TINTO.			1954, courtesy Señor A. Aguilera.			
ALMANZORA	EO	EUME	GUADALORCE	GUADIARO	NAVIA	TINTO
		Displacement :	615 tons standard (720 tons full load)			
		Dimensions :	203 x 28 x 8 feet			
		Guns :	1—3.5 inch, 1—37 mm. AA., 2 M.G.			
		Speed :	13 kts.			

Notes.—Guadiaro and Tinto, built by Cartagena, launched 26 June, 1950, completed 1953. Pendant Nos. DM 11, 13, 10, 14, 8, 12, 9



SEGURA.	BIDASOA	LEREZ	NERVION	SEGURA	TAMBRE	TER
Displacement:		615 tons (704 tons full load)				
Dimensions:		189 (pp.), 210 (o.a.) × 28 × 7½ feet				
Guns:		1—4.1 inch, 1—37 mm. AA., 2—20 mm. AA.				
Machinery:		Triple expansion with exhaust turbines. 2 shafts. H.P. : 2,400 = 16.5 kts.				
Boilers:		2				
Radius:		3,000 at 10 kts.				

Notes.—German M-Boote 40 type. Named after rivers, and carry pendant numbers DM 1, 5, 3, 2, 6, 4, 7, respectively. Guadalete employed as coastguard vessel, sank in a gale 20 miles east of Gibraltar 25 Mar. 1954, with loss of 33 crew.

Name	Builders	Launched	Completed	Name	Builders	Launched	Completed
Bidasoa	Cartagena	15 Sep., 1943	1946	Segura	Cartagena	15 Apr., 1945	1949
Lerez	Cartagena	21 Dec., 1944	1947	Tambre	Ferrol	18 Oct., 1944	1946
Nervion	Cartagena	15 Apr., 1944	1946	Ter	Cartagena	15 Apr., 1945	1948

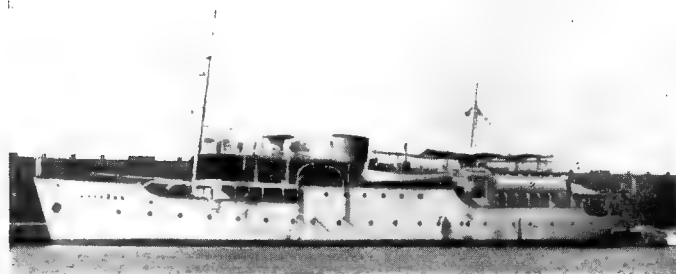
## Coastal Minesweeper.

**NALÓN** (ex-U.S.S. AMS 139)

Displacement : 375 tons  
Complement : 34

Note.—Anti-magnetic minesweeper transferred to Spanish Navy at San Diego, California, 16 Feb., 1954, under MDAP.

## Surveying Vessels (*Buques Planeros*).



1950, Spanish Navy, Official.

**JUAN DE LA COSA** (ex-Artabro)

Displacement : 770 tons (800 tons full load)  
Dimensions : 177½ × 35½ × 8½ feet  
Machinery : Burmeister & Wain Diesels, electric drive. B.H.P. : 700 = 9 kts.  
Notes.—Launched 1935. Carries one aircraft.



1953, Spanish Navy, Official.

**MALASPINA** (ex-Bausa, 13 Sep., 1935) **TOFIÑO** (21 Aug., 1933)

Displacement : 990 tons (1,200 tons full load)  
Dimensions : 224 × 35 × 11 feet  
Guns : 2—4 inch, 1—47 mm., 2 M.G. AA.  
Machinery : Triple expansion. 2 shafts. I.H.P. : 850 = 12.5 kts  
Boilers : 2 Yarrow  
Fuel : 190 tons  
Complement : 130

Notes.—Built by Matagorda, Cadiz and Ferrol, respectively. Launch dates above. Carry one aircraft. Don Alejandro de Malaspina charted the western coast of America in 1789-94.

## Surveying Tenders.

**H 2**

Displacement : 256 tons  
Dimensions : 100 × 20 × 9 feet  
Machinery : H.P. : 300

**H 3**

Note.—Both launches employed as surveying tenders. H 1 stricken off in 1952.

## Motor Torpedo Boats (*Lanchas Torpederas*).



LT 27

1952, Official.

LT 27  
LT 28

LT 29  
LT 30

LT 31  
LT 32

LT 33  
LT 34

LT 35  
LT 36

Displacement : 106 tons (130 tons full load)  
Dimensions : 114 × 16½ × 5 feet  
Guns : 2—20 mm. AA. 4 M.G.  
Machinery : 3 engines. S.H.P. : 2,500 = 41 kts.

Notes.—Built at La Carraca, Cadiz. Design Lurssens of Bremen. LT 27, LT 28, LT 29 handed over to Spanish Navy 10 July, 1953.



LT 23.

1948, Official

LT 21

LT 22

LT 23

LT 24

LT 25

LT 26

Displacement : 100 tons (120 tons full load)  
Dimensions : 114 × 16½ × 4½ feet  
Guns : 2—20 mm. AA., 4 M.G.  
Tubes : 2—21 inch  
Machinery : B.H.P. : 2,960 = 38 kts.  
Radius : 1,000 miles at 30 kts.

Notes.—Purchased August, 1943. In service 1949. Ex-German S 73, S 78, S 124, S 125, S 126, S 134.

## Motor Launches (*Lanchas Rapidas*).

**V 20**

Displacement : 42 tons  
Dimensions : Length : 82 feet  
Guns : 2—20 mm. AA.  
Machinery : Diesel. Speed : 19.2 kts

Note.—Ex-German motor launches

**ESTURIÓN** (V 12)

Displacement : 110 tons  
Dimensions : 72 × 17½ × 6 feet  
Machinery : B.H.P. : 60 = 10.5 kts.

Note.—Both launched 1944.

**V 1**

**V 3**

**V 5**

**V 8**

**V 10**

**V 13**

**V 2**

**V 4**

**V 7**

**V 9**

**V 11**

**V 17**

**V 19**

Note.—Small launches employed on fishery protection duties.

## Surveying Vessels and Coastal Craft—SPAIN

## Coastguard Patrol Vessels (*Guardacostas*).

**CENTINELA**

**SERVOLA**

Displacement : 270 tons  
Dimensions : 119 × 22½ × 9½ feet  
Guns : 1—37 mm.  
Machinery : B.H.P. : 450 = 12 kts

Note.—Completed at A.S.T.A.B.N.O., Ferrol, 1953.

**CIES**

**SALVORA**

Displacement : 180 tons  
Dimensions : 105 × 20½ × 8½ feet  
Guns : 1—37 mm.  
Machinery : B.H.P. : 300 = 12 kts.

Notes.—Purchased in December 1952.



PROCYON.

1951, courtesy Señor A. Aguilera

**PEGASO**

**PROCYON**

Displacement : 437 tons  
Dimensions : 137½ × 27 × 9½ feet  
Guns : 1—3 inch AA., 2—20 mm. AA.  
Speed : 12 kts.

Note.—Both commissioned for service at Cartagena in Jan. 1951.

**ALHUCEMAS**

**FINISTERRE**

Displacement : 236 tons  
Dimensions : 139½ × 19½ × 12½ feet  
Guns : 1—42 mm., 1 M.G.  
Speed : 13 kts.

Note.—Both launched 1944.

**ARCILA** (ex-William Doak)

**XAUEN** (ex-Henry Cramwell)

Displacement : 750 tons  
Dimensions : 138½ (pp.), 148 (o.a.) × 23½ × 15½ feet (Xauen, 17 feet)  
Guns : 2—3 inch (Xauen, 1—3 inch, 1—47 mm. AA.)  
Machinery : I.H.P. : 500 = 10 kts.  
Coal : 200 tons  
Complement : 39

Notes.—"Mersey" type trawlers. Launched 1918 by Goole S.B. & Rep. Co., and Lobnitz.

**UAD QUERT** (ex-Rother, ex-Anthony Aslett)

Displacement : 640 tons  
Dimensions : 130 (p.p.) × 23½ × 15½ feet  
Guns : 2—3 inch  
Machinery : I.H.P. : 500 = 9.5 kts.  
Coal : 200 tons  
Complement : 39

Notes.—Built by Cochran & Sons, Ltd., Selby. Launched 1917. "Special" type trawler. Uad Martin and Tetuan deleted from Navy List 1954.

SPAIN—Patrol Craft, Oilers, etc.

River Patrol Boat.

CABO FRADERA

Displacement : 44 tons  
Dimensions : 74½ × 14½ × 4½ feet  
Guns : 1—42 mm.  
Machinery : H.P.: 120 = 10 kts.  
Complement : 11

Note.—Engaged in patrol of River Mino (Minho) on Portuguese frontier.

Training Ships.

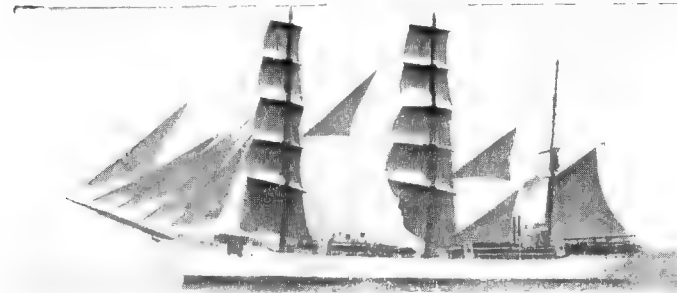


1952 Spanish Navy, Official.

JUAN SEBASTIAN DE ELCANO

Displacement : 3,420 tons (at three-quarters load)  
Dimensions : 269½ (p.p.), 308½ (o.a.) × 43 × 23 feet (full load)  
Guns : 4—6 pdr.  
Machinery : 1 Sulzer Diesel motor. 1 screw. B.H.P.: 800 = 9.5 kts.  
Oil fuel : 230 tons  
Endurance : 10,000 miles at 9.5 kts.  
Complement : 224 + 80 cadets

Notes.—Four-masted schooner. Named after the first circumnavigator of the world (1519-26) who succeeded to the command of the expedition led by Magallanes after the latter's death. Builders : Echevarrieta Yard, Cadiz. Launched 5 Mar. 1927. Completed 1928.



1949, Mr. Donald Duncan.

GALATEA (ex-Barque Clarastella)

Displacement : 2,713 tons  
Dimensions : 243 × 38½ × 17½ feet  
Guns : 4—6 pdr.  
Machinery : 2 auxiliary Diesel motors. B.H.P. : 900 = 8.5 kts.  
Oil fuel : 46 tons

Notes.—Launched 1896. Purchased in Italy, 1922. Training ship for boys. Vorgen de la Caridad discarded 1953.

Oilers.

I New Construction.

Displacement : 7,205 tons  
Dimensions : 385½ × 48½ × 20½ feet  
Guns : 1—4.1 inch  
Machinery : 2 Diesels. B.H.P. : 2,800 = 12 kts.

Notes.—Ordered from Factoria de Bazan, Cartagena, in December, 1952.

PP 1

Displacement : 470 tons  
Dimensions : 138 (pp.), 147½ (o.a.) × 25 × 9½ feet  
Machinery : Deutz Diesel. B.H.P. : 220 = 10 kts.  
Complement : 12

PP 2

Note.—Both built at Santander and launched 1939.



1954, courtesy Senor A. Aguilera.

PLUTON (ex-Campilo)

Displacement : 4,550 tons (in light condition)  
Dimensions : 342½ × 53½ × 19½ feet  
Machinery : 2 sets E. & W. Diesels. B.H.P. : 2,530 = 13.5 kts.

Notes.—Built at Valencia and launched 1931. Purchased in Dec. 1934. Diesels built at Barcelona.

Transports.

ALMIRANTE LOBO (ex-Torrelaguna)

Displacement : 7,750 tons  
Dimensions : 342 × 48 × 22½ feet  
Guns : 1—4.1 inch  
Machinery : 1 triple expansion. I.H.P. : 2,260 = 12 kts.

Notes.—Under construction at Astilleros Echevarrieta, Cadiz.



1954, courtesy Senor A. Aguilera.

TARIFA (ex-Castillo Arevalo)

Displacement : 1,325 tons  
Dimensions : 270 × 35 × — feet  
Machinery : I.H.P. : 840 = 10 kts.

Patrol Vessels.



RR 29.

1954, Spanish Navy, Official.

RR 10

RR 19

RR 20

RR 28

RR 29

Displacement : 454 tons  
Dimensions : 124 × 27½ × 10 feet  
Guns : 1—47 mm., 1—20 mm. AA.  
Machinery : 1 shaft. I.H.P. : 800 = 11.5 kts.  
Coal : 200 tons  
Radius : 1,000 miles at 10 kts.

Note.—Former tugs.

Sea-going Tugs (Remolcadores).

VALEN

Displacement : 934 tons  
Dimensions : 184 × 32½ × 12 (max.) feet  
Guns : 1—37 mm.  
Machinery : 2 Diesels. B.H.P. : 2,500 = 15 kts

No e —Ordered in 1949. Under construction at Factoria de Bazan, Cartagena

RA 2 (ex-Argos)

Displacement : 217 tons  
Dimensions : 123 × 23½ × — feet  
Machinery : I.H.P. : 750 = 10 kts.

RR 25

Builders : La Carraca Dockyard, Cadiz  
Launched : 26 Mar. 1944  
Displacement : 300 tons

RR 15

RR 16

RR 17

Displacement : 434 tons  
Dimensions : 124 × 27½ × 10 feet  
Machinery : I.H.P. : 800 = 11.5 kts.

RR 11

Displacement : 279 tons  
Dimensions : 111½ × 20 × — feet  
Machinery : I.H.P. : 600 = 11 kts.

RR 12 (ex-Cartagenero, ex-H.S. 78)

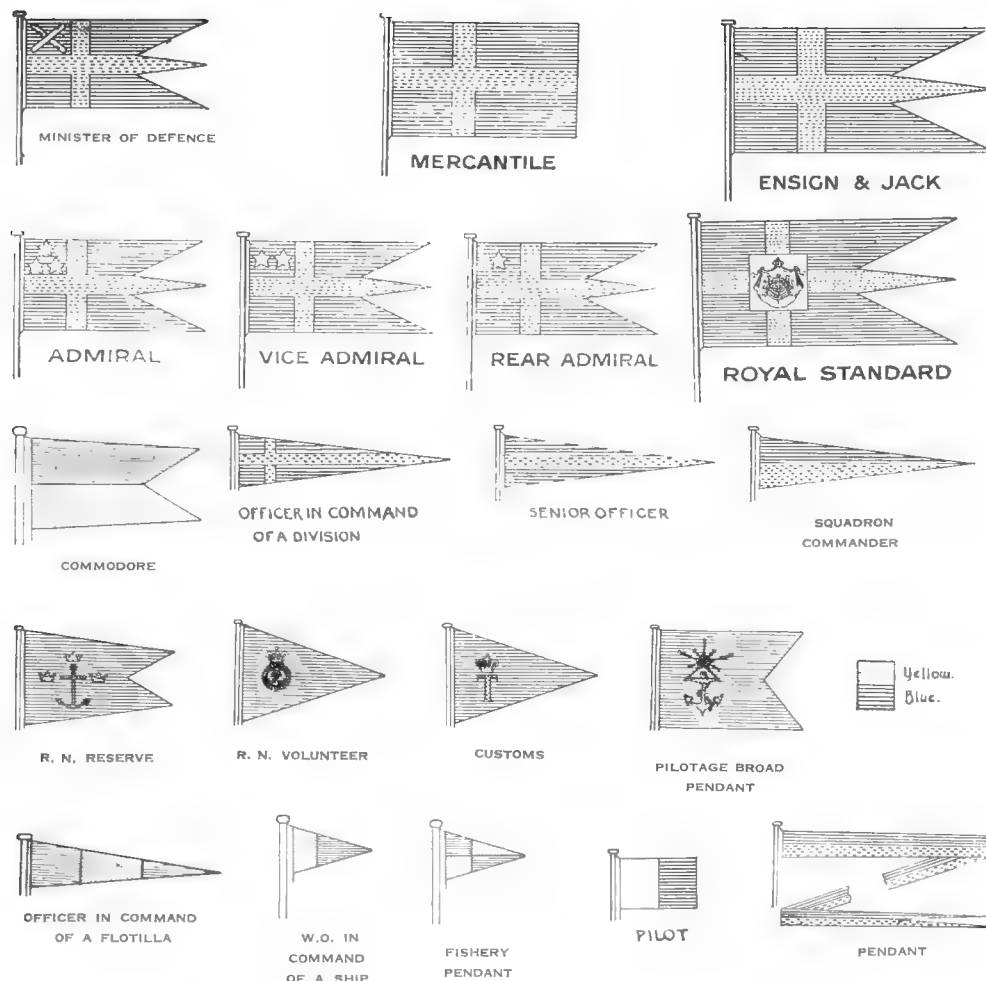
RR 14 (ex-Gaditano, ex-H.S. 82)

Displacement : 235 tons  
Dimensions : 83½ × 21½ × 10½ feet  
Guns : 1—6 pdr.  
Machinery : I.H.P. : 420 = 10 kts.

Notes.—Built by Crichton & Co., South Saltney, Chester, 1918. There are a number of small tugs in service, with prefix RP.

# ROYAL SWEDISH NAVY

## Flags.

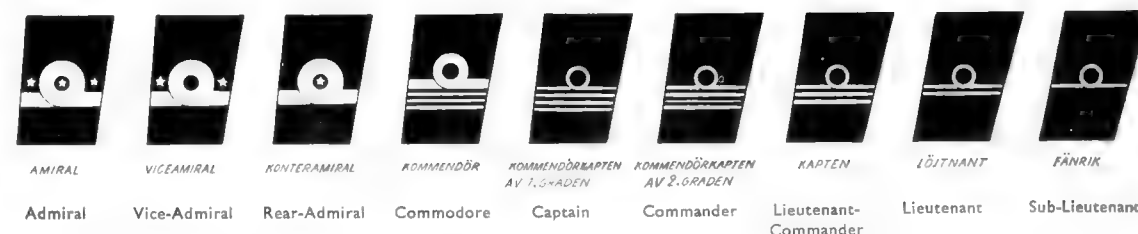


## Administration.

Minister of Defence : Mr. T. Nilsson M.P.  
 Commander-in-Chief of the Navy (including Coast Artillery) : Vice-Admiral Stig H. son Ericson.  
 President of the Navy Technical and Administrative Board : Rear-Admiral A. G. Jeduc-Palmgren.  
 Commander-in-Chief of Active Fleet : Rear-Admiral E. af Klint.

Naval Attaché in London : Commodore G. S. Tham, R.Sw.N.

## Uniforms.



Supply Officers have similar stripes with white braid following uppermost stripe.  
 Other branches have colour between stripes as follows :

Constructors and Engineers, purple blue ;  
 Surgeons, scarlet.

## Navy Estimates.

1949-50, 172,252,600 kr.	1952-53, 285,000,000 kr.	1954-55, 406,344 kr.
1950-51, 166,997,000 kr.	1953-54, 397,819,000 kr.	

## Six Year Programme.

Naval programme 1952-58 : Four destroyers of improved "Oland" class to replace the cruiser *Gotland* and two over-age destroyers in the active fleet. Eleven 140-tons MTB, 15 smaller MTB, 3 submarines, 1 minelayer and 12 minesweepers are to be built under the plan and 11 older destroyers are to be converted into frigates.

## Ships.

Colour of Ships : Light grey all over, excepting submarines, frigates, minesweepers and some training ships.  
 Displacements : "Standard."

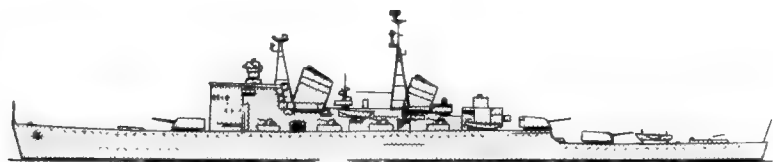
## Personnel.

Active List of Navy and Coast Artillery, about 13,500 officers and men, including the conscript class of the year (5,500).  
 Total for Reserves cannot be estimated, as foregoing total includes certain classes called up for service.

## Mercantile Marine.

Lloyd's Register appendix, 1954 : 1,272 vessels of 2,577,754 tons gross.





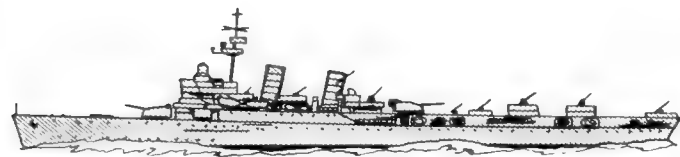
GOTA LEJON, TRE KRONOR.\*



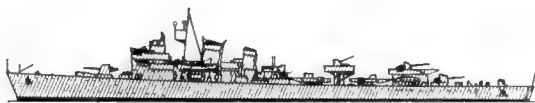
ÖLAND Class.\*



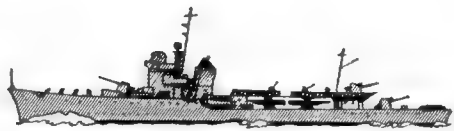
GÖTEBORG Class.



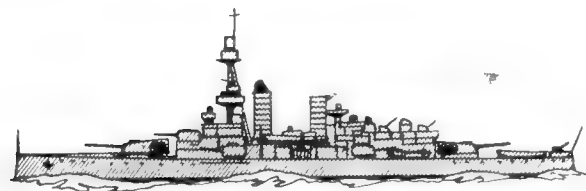
GOTLAND.



VISBY Class.



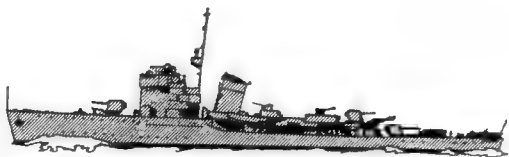
REMUS, ROMULUS.



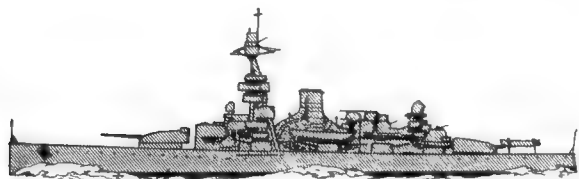
DROTTNING VICTORIA.



GÄVLE, NORRKÖPING.\*



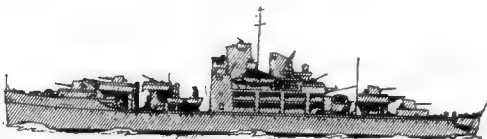
MJÖLNER Class.



GUSTAF V.



KLAS HORN.\*



ÄLVSNABBEN.



HALLAND Class.



EHRENSKÖLD, NORDENSKJÖLD.\*



CLAS FLEMING.

Cruisers.



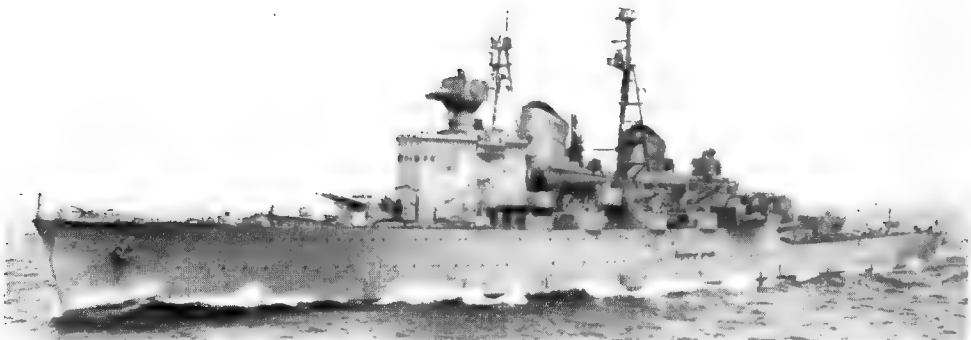
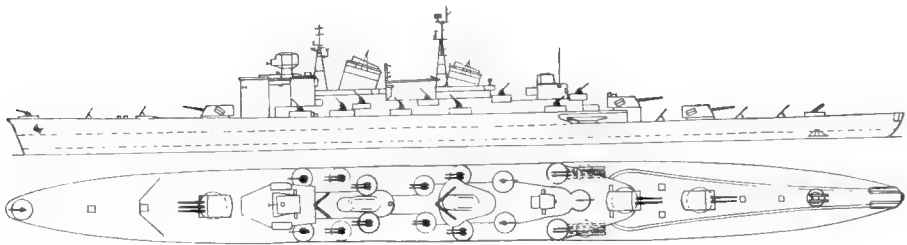
GÖTA LEJON.

1954, Wright & Logan

GÖTA LEJON

TRE KRONOR

Displacement : 8,000 tons standard designed  
Dimensions : Length : 571 (w.l.), 590½ (o.a.) feet. Beam : 54 feet  
Guns (Bofors) : 7—6 inch, 53 cal. AA., 27—40 mm. AA., D.C.T.  
Tubes : 6—21 inch  
Armour : Exceptionally well protected, 3"-5" side  
Mines : 160  
Machinery : 2 sets De Laval geared turbines. 2 shafts. S.H.P. : 100,000 = 33 kts.  
Boilers : 4 Swedish 4-drum type  
Complement : 618



GÖTA LEJON.

1953, Swedish Navy, Official.



GÖTA LEJON.

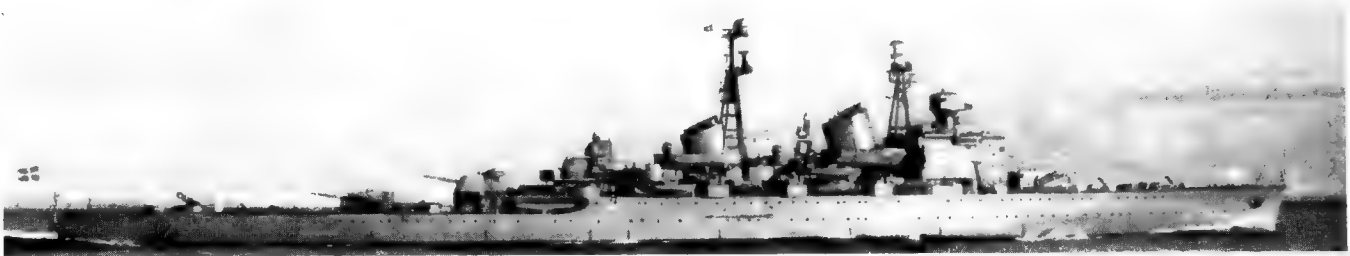
1954, Wright & Logan.

**Appearance Notes.**—Light tripod masts have been stepped as in photos. Both ships now have enclosed tower bridge structure.

**General Notes.**—Final contracts for these ships were not signed until Feb. 1943, the original design having been considerably modified in 1942. Cost estimated at 74,000,000 kroner each. Radar control arrangements installed for 6-inch guns. Fitted for mine-laying. Both ships were reconstructed in 1951-52.

**Gunnery Notes.**—The 6-inch guns are high angle anti-aircraft weapons and automatic. The 9—25 mm. AA. pieces formerly mounted were suppressed in 1951 and 7—40 mm. AA. weapons added.

Name	Builder	Laid down	Launched	Completed
Göta Lejon	Eriksberg	27 Sep., 1943	17 Nov., 1945	1947
Tre Kronor	Götaverken	27 Sep., 1943	16 Dec., 1944	1947



GÖTA LEJON.

1953, Swedish Navy, Official.

SWEDEN—Cruisers

Anti-Aircraft Cruiser.

(Cadet's Seagoing Training Ship).



GOTLAND.

1949, Official.

GOTLAND

- Builders :

Laid down :

Launched :

Completed :
- Götaverken

1930

14 Sep., 1933

Dec., 1934.
- Displacement :

Dimensions :

Guns (Bofors) :

Tubes :

Armour :

Machinery :

Boilers :

Oil fuel :

Complement :
- 4,750 tons (5,400 full load)

Length : 426½ (w.l.), 437½ (o.a.) feet. Beam : 50½ feet. Draught : 16½ (mean), 18 feet (max.)

6—6 inch 55 cal., 4—3 inch. AA., 8—40 mm. AA., 12—25 mm. AA., 2—20 mm. AA.

6—21 inch (in triple deck mountings)

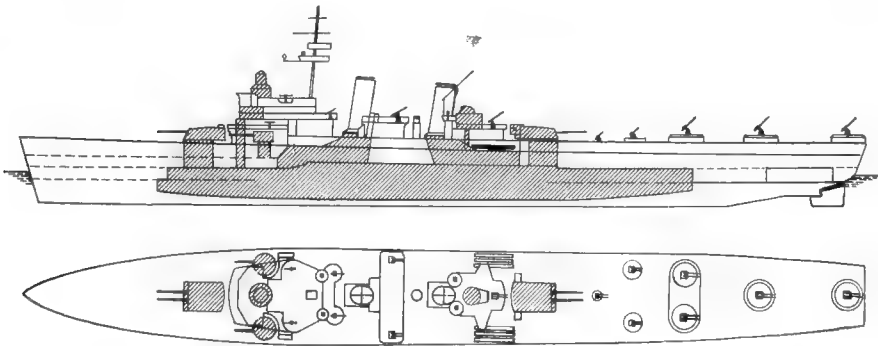
2—1½" deck, 1½—¾" vertical bulkheads, 2"—1½" turrets, 1½" uptakes, 2"—1½" hoists and supports, 2" C.T.

2 sets De Laval geared turbines. 2 shafts. Designed S.H.P. : = 27.5 kts. (Trials, 34,000 = 28 kts.)

4 Penhoët

600 tons normal, 800 tons max.

453 (400 to 460 as training ship)



Notes.—Cost exceeded £900,000 by date of completion. Equipped for minelaying. Refitted and rearmed for duty as an anti-aircraft cruiser in 1944. Recently employed as Cadets' Seagoing Training Ship.

Armoured Ships (Pansarskepp).



DROTTNING VICTORIA.

Added 1951, Dir. Ossi Janson.



GUSTAF V.

1949, Official.

DROTTNING VICTORIA

GUSTAF V

- Displacement :

Dimensions :

Guns (Bofors) :

Armour (Carnegie and Bofors) :

Machinery :

Boilers :

Fuel :

Complement :
- 7,120 and 7,275 tons, respectively.

Length : 397 feet (w.l.). Beam : 61 feet. Draught : 22½ feet (max.)

4—11 inch, 45 cal., 6—6 inch, 50 cal., 4—3 inch AA., 6—40 mm. AA., 4—25 mm. AA.

8" belt (amidships), 6"—3" belt (ends), 1½" deck (slopes), 4" redoubt, 8" big gun turrets, 6" barbettes

5"—2½" small turrets, 7" conning tower.

Westinghouse geared turbines by the Motala Company. 2 shafts.

6 Yarrow (coal and mixed-firing) and 2 Penhoët oil burning. Designed S.H.P. : 22,000 = 22.5 kts.

360 tons coal + 273 tons oil

600
- General Notes.—

Gunnery Notes.—

Armour Notes.—
- Appearance originally as Drottning Victoria but with light tripod foremast. Drottning Victoria refitted 1927. Gustaf V reconstructed 1929-30 when funnels were trunked into one and upperworks considerable remodelled. Drottning Victoria was reconstructed in 1933-35, when 6 of her original 12 boilers were changed for 2 oil-fired boilers. Gustaf V was similarly modernised in 1935-37, and her armament modified. Sister ship Sverige was scrapped in 1953.

11-inch guns load in 17 seconds. Turrets somewhat cramped, being divided by partition bulkheads. Drottning Victoria has two extra 6-inch guns mounted abaft forward 11-inch ; midships 6-inch on either beam is replaced by a pair of 40-mm. AA. and a third pair is mounted at stern.

11-inch gun shields are 8" at front, 4" on side, 4½" rear. Smaller gunshields are 5" front, 3" sides.

Name	Builders	Laid down	Launched	Completed
Drottning Victoria	Götaverken, Göteborg	1915	15 Sep., 1917	Mar. 1921
Gustaf V	Kockums Mek. Verkstads A/B. Malmö	1914	31 Jan., 1918	Dec. 1922

Destroyers (Jagare).

4 New Construction.

GÄSTRIKLAND

HÄLSINGLAND

ÖSTERGÖTLAND

SÖDERMANLAND

Displacement: 2,000 tons  
Guns: 4—4.7 inch, and 40 mm.  
Tubes: 6—21 inch  
Speed: 35 kts.

2 "Holland" Class.

HALLAND

SMÅLAND

Displacement: 2,600 tons  
Dimensions: 380½ × 41 × — feet  
Guns: 4—4.7 inch AA., 2—57 mm. AA., 6—40 mm. AA.  
Tubes: 8—21 inch  
Speed: 35 kts.  
Complement: 290

Note.—Fully automatic gun turrets.

Pendant No.	Name	Builders	Launched	Completed
18	Holland	Götaverken	16 July 1952	1954
19	Smaland	Eriksberg	23 Oct. 1952	1954

2 "Öland" Class.



ÖLAND.

1951, Dir. Ossi Janson.



UPPLAND.

1949, Official

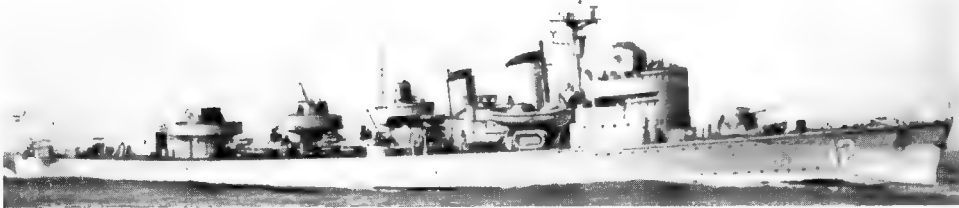
ÖLAND

UPPLAND

Displacement: 1,880 tons (2,110 tons loaded)  
Dimensions: 351 × 36½ × 11½ feet  
Guns: 4—4.7 inch (d.p.), 7—40 mm. AA., 8—25 mm. AA.  
Tubes: 6—21 inch (tripled)  
Machinery: De Laval geared turbines. 2 shafts. S.H.P.: 44,000 = 35 kts.  
Complement: 210

Pendant No.	Name	Builders	Laid down	Launched	Completed
16	Öland	Kockums M.V.	1943	15 Dec., 1945	1948
17	Uppland	Karlskrona Dockyard	1943	15 Nov., 1946	1949

4 "Visby" Class.



SUNDSVALL

1953, Swedish Navy, Official.

HÄLSINGBORG

KALMAR

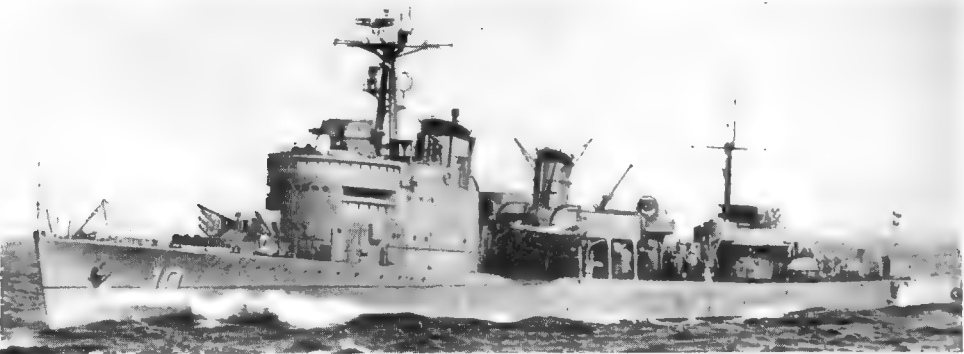
SUNDSVALL

VISBY

Displacement: 1,150 tons (1,320 tons full load)  
Dimensions: 310 (w.l.), 320 (o.a.) × 30 × 9 (mean, 12 (max.) feet  
Guns: 3—4.7 inch, 4—40 mm. AA., 4—20 mm. AA., 2 D.C.T.  
Tubes: 6—21 inch (tripled)  
Machinery: De Laval geared turbines. 2 shafts. S.H.P.: 36,000 = 39 kts.  
Boilers: 3, of 3-drum type  
Oil fuel: 150 tons  
Complement: 140

No.	Name	Builders	Laid down	Launched	No.	Name	Builders	Laid down	Launched
13	Hälsingborg	Götaverken	23 Mar., 1943	1943	12	Sundsvall	Eriksberg	29 Apr., 1942	20 Oct., 1942
14	Kalmar	Eriksberg	16 Nov., 1942	20 Jul., 1943	11	Visby	Götaverken	16 Oct., 1942	1942

6 "Göteborg" Class.



NORRKÖPING

1954, Swedish Navy, Official

GÄVLE

GÖTEBORG

KARLSKRONA

MALMÖ

NORRKÖPING

STOCKHOLM

Displacement: 1,140 tons (1,300 tons full load)  
Dimensions: 304 (w.l.), 310½ (o.a.) × 29½ × 9 (mean), 12 (max.) feet  
Guns: 3—4.7 inch, 4—40 mm, 2 D.C.T.  
Tubes: 6—21 inch (tripled). Gävle as refitted has 18 rocket launchers.  
Machinery: De Laval geared turbines. 2 shafts. S.H.P.: 32,000 = 39 kts.  
Boilers: 3 Penhoët  
Oil fuel: 150 tons  
Complement: 130

Notes.—Göteborg and Stockholm laid down 1933. Göteborg, sunk through accidental explosion Sep., 1941, was subsequently salvaged and rebuilt. On trials following reconstruction she is reported to have exceeded original speed. Göteborg, Karlskrona, Malmö and Stockholm scheduled for conversion to A/S (to be rebuilt as frigates).

No.	Name	Builders	Launched	Completed	No.	Name	Builders	Launched	Completed
9	Gävle	Götaverken	25 Sep., 1940	1941	7	Malmö	Eriksberg	22 Sep., 1938	1939
5	Göteborg	Götaverken	14 Oct., 1935	1936	10	Norrköping	Eriksberg	5 Sep., 1940	1941
8	Karlskrona	Karlskrona	16 Jun., 1939	1940	6	Stockholm	Karlskrona	24 Mar., 1936	1937

SWEDEN—Fast A/S Frigates

Fast A/S Frigates (ex-Destroyers). Rated as Fregatter.



Added 1951 Official.

KLAS HORN

Builders :	Karlskrona Dockyard
Launched :	13 Jun., 1931
Displacement :	1,050 tons
Dimensions :	297 (w.l.) × 29½ × 12½ (max.) feet
Guns :	3—4.7 inch, 6—25 mm. AA.
Tubes :	6—21 inch (tripled). Fitted for minelaying
Machinery :	De Laval geared turbines. 2 shafts. S.H.P. : 24,000 = 35 kts.
Boilers :	3 Penhoët
Oil fuel :	150 tons
Radius :	600 miles at full speed ; 1,600 miles at 20 kts.
Complement :	125

Notes.—Sunk by accidental explosion in Sept., 1941, but since salvaged and refitted. Scheduled for conversion to anti-submarine vessel. To be rebuilt as a frigate. Pendant No. 3.



EHRENSKÖLD.

EHRENSKÖLD

Displacement :	1,080 tons
Dimensions :	293 (w.l.) × 29½ × 12½ (max.) feet
Guns :	1 — 4.7 inch, 4—40 mm. AA.
Machinery :	Geared turbines, 2 shafts. S.H.P. : 24,000 = 35 kts.
Boilers :	2 Penhoët
Oil fuel :	150 tons
Radius :	1,600 miles at 20 kts.
Complement :	125

NORDENSKJÖLD

1953, Swedish Navy, Official

Notes.—Former destroyers converted into anti-submarine vessels with new armament in 1951 and now officially rated as frigates.

Pendant No.	Name	Builders	Laid down	Launched	Completed
71	Ehrensöld	Kockums M.V., Malmö	1924	25 Sep., 1926	1927
72	Nordenskjöld	Götaverken, Göteborg	1924	19 Jun., 1926	1927

4 “Mjölner” Class.



MJÖLNER.

Added 1949

MAGNE

MODE

MJÖLNER

MUNIN

Displacement :	700 tons (900 tons full load)
Dimensions :	243½ (w.l.), 256 (o.a.) × 26½ × 7½ feet
Guns :	3—4.1 inch AA., 2—40 mm. AA., 2—20 mm. AA.
Tubes :	3—21 inch
Machinery :	2 De Laval geared turbines. 2 shafts. S.H.P. : 16,000 = 30 kts.
Boilers :	2, of 3-drum type
Complement	100

Notes.—Design appears to be a modification of Romulus type, below. Equipped for minelaying. Formerly rated as seagoing torpedo boats or coastal d-destroyers (kustjagare), but all scheduled for conversion into anti-submarine vessels. To be rebuilt as frigates

Pendant Nos.	Name	Builders	Laid down	Launched	Completed
30	Magne	Götaverken	Sep., 1941	25 Apr., 1942	1942
29	Mode	Götaverken	Sep., 1941	11 Apr., 1942	1942
32	Mjölner	Eriksberg	Sep., 1941	9 Apr., 1942	1942
31	Munin	Öresundsvarvet	Sep., 1941	27 May, 1942	1942

2 “Romulus” Class.



ROMULUS.

1949, Official.

REMUS (ex-Astore)

ROMULUS (ex-Spica)

Displacement :	870 tons (1,050 tons full load)
Dimensions :	255 (w.l.), 263½ (o.a.) × 27 × 7½ feet
Guns :	3—3.9 inch, 47 cal., 6—20 mm. AA.
Tubes :	4—18 inch (paired)
Machinery :	2 Tosi geared turbines. 2 shafts. S.H.P. : 19,000 = 34 kts
Boilers :	2, of 3-drum type
Oil fuel :	200 tons
Complement :	94

Notes.—Ex-Italian. Acquired 1940. Carries mines. Formerly rated as oceangoing torpedo boats or escort destroyers (jagare) but both are now scheduled for conversion into fast anti-submarine escort vessels. To be rebuilt as frigates.

Pendant Nos.	Name	Builders	Laid down	Launched	Completed
28	Remus	Napoletoni Yard, Naples	May 1933	22 Apr., 1934	June 1935
27	Romulus	Napoletoni Yard, Naples	May 1933	11 Mar., 1934	May 1935





SWEDEN—Minelayers, Radar Training Ship, Submarine Depot Ship, M.T.B.s

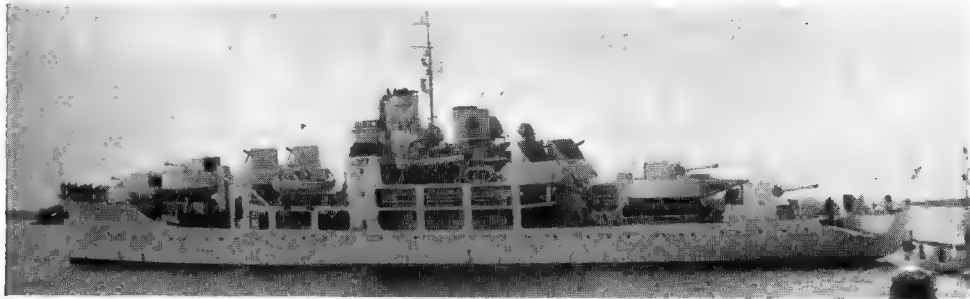
Minelayers (Minfartyg).

I New Construction.

ÅLVSBERG

Displacement : 2,000 tons  
Speed : 20 kts.

Notes.—Provided under the 1952-58 building programme to replace *Clas Fleming*.



ÅLVSNABBen

Displacement : 4,000 tons  
Dimensions : 317½ (w.l.), 334½ (o.a.) × 44½ × 16 feet  
Guns : 4—6 inch, 8—40 mm. AA., 6—20 mm. AA.  
Complement : 255

1954, Swedish Navy, Official.

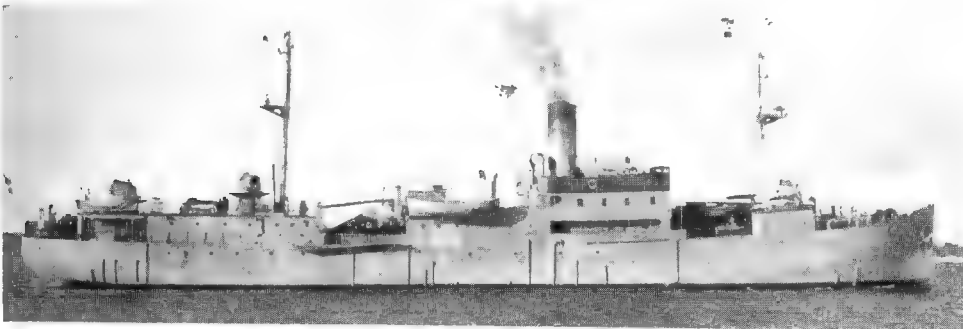
Notes.—Built by Eriksberg, laid down Oct., 1942, launched 19 Jan., 1943. Was completed on mercantile hull in April, 1943. Can be used as Submarine Parent Ship or Minesweeper Depot Ship. Training ship winter of 1953-54.

CLAS FLEMING

Builders : Bergsund Co., Stockholm  
Launched : 1912  
Displacement : 1,735 tons  
Dimensions : 282 × 34 × 14 feet  
Guns : 4—4.7 inch, 50 cal., 3—40 mm. AA.  
Mines : 250  
Machinery : Diesel-turbine installation by Gotaverken. 2 shafts. B.H.P. : 7,000 = 20 kts.  
Complement : 175

Notes.—Has gas-turbine propulsion, the diesel made compressed air and exhaust gases from the diesels working on the turbines.

Radar Training Ship.



PRINS CARL (ex-Munin)

Displacement : 2,140 tons  
Dimensions : 262½ × 37 × 16½ feet  
Speed : 12 kts.  
Complement : 60

1950 Swedish Navy, Official.

Notes.—Ex-hospital ship. Launched in 1931 and converted into a Radar Training Ship in 1949.

Submarine Depot Ship (Ubåts depåfartyg).



PATRICIA (ex-Patris I)

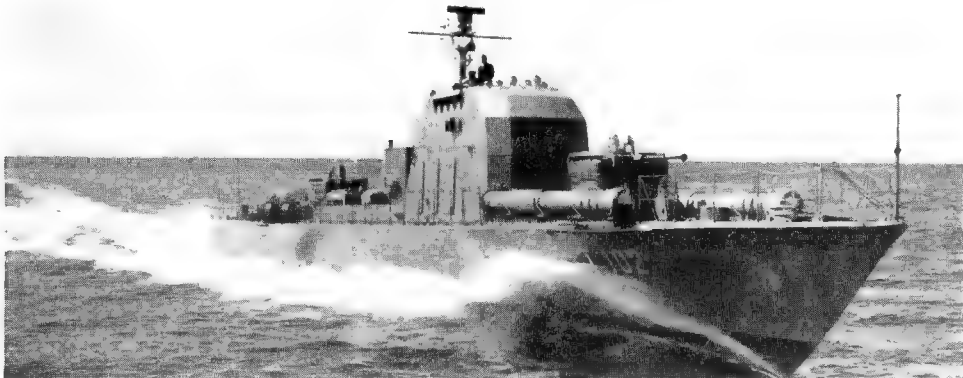
Displacement : 4,950 tons  
Dimensions : 335 × 47½ × 20 feet.  
Guns : 8—40 mm. AA., 2—20 mm. AA.  
Machinery : Triple expansion. I.H.P. : 2,900 = 15 kts.  
Boilers : 2 oil fired

1953, Swedish Navy, Official.

Notes.—Built by Swan, Hunter & Wigham Richardson, launched 1926. Acquired 1940. Was reconstructed to increase accommodation.

Motor Torpedo Boats (Motortorpedbåtar).

12 M.T.B.—M.G.B. Convertibles.



PLEJAD.

ALDEBARAN (T 107)  
ALTAIR (T 108)  
ANTARES (T 109)

ARCTURUS (T 110)  
ARGO (T 111)  
ASTREA (T 112)

PERSEUS (T 101)  
PLEJAD (T 102)  
POLARIS (T 103)

1954, Swedish Navy, Official.

POLLUX (T 104)  
REGULUS (T 105)  
RIGEL (T 106)

Displacement : 140 tons  
Dimensions : 147½ × 19 × — feet  
Guns : 2—40 mm. Bofors  
Tubes : 6—21 inch (2 forward, 4 aft)  
Machinery : 2 diesels. 2 shafts. B.H.P. : 5,200 = 40.5 kts.  
Complement : 32

Notes.—Perseus, launched in 1950, is the first of a new convertible type M.T.B. of experimental design, re-engined with Götaverken machinery to give much greater power. T 102—T 107 (see details above) are of Lürssen (Bremen) design. Claimed to be "atom-proof."

# Motor Torpedo Boats (continued).

T 42	T 45	T 48	T 51	T 54
T 43	T 46	T 49	T 52	T 55
T 44	T 47	T 50	T 53	T 56

Displacement : 40 tons

Note.—Under construction.



T 38. 1953, Swedish Navy, Official.

T 32	T 34	T 36	T 38	T 40
T 33	T 35	T 37	T 39	T 41

Displacement : 40 tons  
Dimensions :  $75\frac{1}{2} \times 17 \times$  — feet  
Guns : 1—40 mm.  
Tubes : 2—21 inch

Notes.—Launched 1951-52. Of improved T 31 design.

T 21	T 23	T 25	T 27	T 29	T 31
T 22	T 24	T 26	T 28	T 30	

Displacement : 27 tons  
Dimensions :  $65\frac{1}{2} \times 15\frac{1}{2}$  feet  
Guns : 1—20 mm.  
Tubes : 2—21 inch  
Machinery : 2 Isotta-Fraschini motors. H.P. : 2,300 — 40 kts.

Notes.—Built by Kockums M.V. T 21—26 launched 1942. T 27—31 launched 1943.



T 15. 1953, Swedish Navy, Official.

T 15	T 16	T 17	T 18
------	------	------	------

Displacement : 22 tons  
Dimensions :  $61\frac{1}{2} \times 15$  feet  
Guns : 1—20 mm.  
Tubes : 2—18 inch  
Machinery : 2 Isotta-Fraschini motors. H.P. : 2,300 = 40 kts.

Notes.—Built by Kockums M.V. Launched 1941. Above boats are of Swedish naval design. They are constructed of welded steel, instead of wood, as in the case of earlier craft.

# Minesweepers.

M 61	M 63	M 65	M 67
M 62	M 64	M 66	M 68



HANÖ 1954, Swedish Navy, Official.

ARKÖ (M 57)	ORNÖ (M 55)	TÄRNÖ (M 52)
HANÖ (M 51)	SPARÖ (M 58)	TJURKÖ (M 53)
IGGÖ (M 60)	STURKÖ (M 54)	UTÖ (M 56)
KARLSÖ (M 59)		

Displacement : 260 tons  
Dimensions :  $131\frac{1}{2} \times 23 \times$  — feet  
Guns : 2—40 mm. AA.  
Speed : 14.5 kts.

Note.—Twelve M 57-68 under construction or projected.



ORSKAR 1953, Swedish Navy, Official.

3 Eriksberg	Lindholmen
BREDSKÄR (Dec. 12, 1940)	ÖRSKÄR (March 31, 1941)
BREMÖN (June 18, 1940)	RAMSKÄR (Oct. 28, 1940)
HOLMÖN (Sept. 5, 1940)	
1 Finnboda	2 Oskarshamn
GRÖNSKÄR (Oct. 30, 1940)	SANDÖN (Aug. 15, 1940)
	ULVÖN (April 29, 1941)
2 Götaverken	2 Öresundsvärvt
VEN (Oct. 7, 1940)	KOSTER (Oct. 10, 1940)
VINGA (Oct. 7, 1940)	KULLEN (Oct. 29, 1940)

Displacement : 430 tons (500 tons full load)  
Guns : 2—4.1 inch, 2—25 mm. AA.  
Speed : 17 kts.  
Complement : 37

Notes.—Otherwise of similar design to Arholma and Landsort, in next column. All completed in 1940-41. Builders and launch dates above.

# Minesweepers—continued.



LANDSORT. 1949, Official.

ARHOLMA (April 27, 1937)	LANDSORT (Nov. 26, 1937)
Displacement : 430 tons standard (500 tons full load)	
Dimensions : $178\frac{1}{2}$ (w.l.), 186 (o.a.) $\times$ $24\frac{1}{2} \times 7$ (max.) feet	
Guns : 2—4.1 inch, 2—25 mm. AA.	
Machinery : De Laval geared turbines. S.H.P. : 3,200 = 19 kts.	
Oil fuel : 60 tons	
Complement : 37	

Notes.—Both built at Karlskrona. Launch dates above.



KAPAREN. 1949 Official.

JÄGAREN (Dec., 1932)	SNAPPHANEN (Nov. 2, 1933)
KAPAREN (March 3, 1933)	VÄKTAREN (April 25, 1934)

Displacement : 310 tons  
Dimensions :  $170\frac{1}{2} \times 19\frac{1}{2} \times 8\frac{1}{2}$  feet  
Guns : 2—3 inch, 2—25 mm. AA., 2 D.C.T.  
Machinery : De Laval geared turbines. S.H.P. : 3,600 = 23 kts.  
Boilers : Vanson-Normand  
Oil fuel : 50 tons  
Complement : 37

Notes.—All built at Karlskrona. Launch dates above. Pendant Nos. 41 to 44, respectively

## SWEDEN—Coastal Minesweepers, Patrol Vessels, Mining Tenders, etc.

### Coastal Minesweepers.

#### ORUST

Displacement : 100 tons  
Dimensions : 62 × 19 × 4½ feet  
Guns : 2—25 mm. AA.

Note.—Both launched 1948.

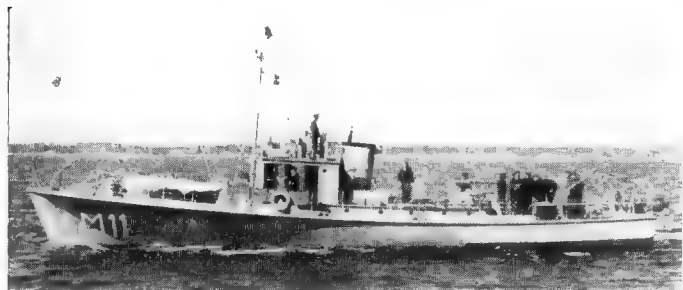


M 25. 1953, Swedish Navy, Official.

M 15	M 18	M 21	M 23	M 25
M 16	M 19	M 22	M 24	M 26
M 17	M 20			

Displacement : 70 tons  
Dimensions : 85½ × 16½ × 4½ feet  
Guns : 1—20 mm.  
Machinery : Diesel. B.H.P. : 600 = 13 kts

Note.—All launched 1941.



M 11. 1953, Swedish Navy, Official.

M 3	M 6	M 9	M 11	M 13
M 4	M 7	M 10	M 12	M 14
M 5	M 8			

Displacement : 50 tons  
Dimensions : 77 × 16½ × 4½ feet  
Guns : 1—20 mm. AA.  
Machinery : Diesel. B.H.P. : 400 = 13 kts.

Note.—All launched 1940-41. M 1 and M 2 were scrapped in 1953.

### Patrol Vessels. (Trawler Type)

#### GRANAT

#### HARPUN

#### KANON

#### KRUT

Displacement : 400 tons  
Dimensions : 110 × 23 × 14 feet  
Guns : 1—57 mm.  
Speed : 10 kts.

Notes.—Launched 1925. All four converted trawlers.

### Patrol Vessels (Vedettbåtar).



1946, Official.

V 51 (1944)	V 53 (Dec. 4, 1944)	V 55 (Sep. 19, 1944)	V 57
V 52 (Oct. 4, 1945)	V 54 (Oct. 4, 1945)	V 56 (Aug. 2, 1945)	

Displacement : 125 tons  
Dimensions : 98 × 17½ × 6 feet  
Guns : 1—20 mm., 1 M.G.  
Machinery : Triple expansion. H.P. : 400 = 12 kts  
Boiler : Watertube (coal-burning)

Note.—Launch dates above. V 57 similar to V 51—56 but has diesel machinery.

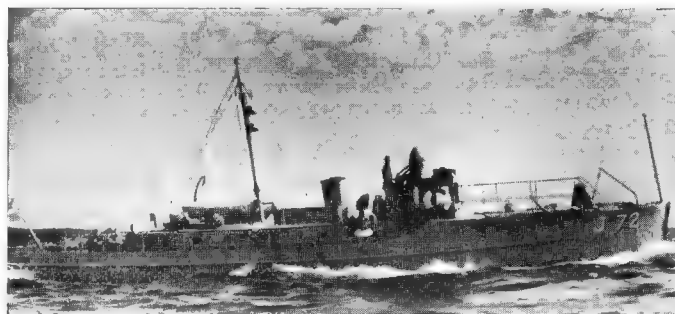
#### EDÖFJÄRD

#### KANHÖLMSFJÄRD

#### LIDÖFJÄRD

Displacement : 28 tons  
Dimensions : 69 × 12½ × 5 feet  
Guns : 1—37 mm.  
Speed : 11.5 kts.

Notes.—Launched 1933. Pendant Nos. : J 76, J 74, J 75, respectively.



BAGGENSFJÄRD. 1946 courtesy Swedish Defence Staff.  
ASKÖFJÄRD NÄMNDÖFJÄRD

Displacement : 25 tons  
Dimensions : 62½ × 12½ × 5 feet  
Guns : 1—37 mm.  
Speed : 11.5 kts.

Notes.—Launched 1932. Pendant Nos. : J 71, J 72, J 73, respectively  
V 5 V 8 V 14

Displacement : 50 tons  
Dimensions : 105 × 13½ × 6½ feet  
Guns : 1—37 mm.  
Machinery : H.P. : 800 = 15 kts.  
Coal : 11 tons  
Complement : 14

Notes.—Ex-torpedo boats. Launched 1906-08. All above boats manned by Coast Artillery.  
V 42

Launched : 1902  
Displacement : 54 tons  
Dimensions : 66½ × 16½ × 6 feet  
Guns : 1—37 mm.  
Speed : 10 kts.

### Communication Ship (Förbindelsefartyget).



1953, Swedish Navy, Official.

#### MARIEHOLM

Completed : 1934  
Displacement : 1,445 tons  
Dimensions : 210 × 32½ × 14 feet  
Guns : 2—40 mm. AA.  
Speed : 12 kts.

Notes.—Former passenger ship, converted during Second World War to serve as a Base Communication Centre for the C-in-C. Active Fleet. Recently used as a Staff Ship for the C-in-C. in winter time, flying his flag.

### Patrol Launches.

#### SVK 1

#### SVK 2

#### SVK 3

#### SVK 4

#### SVK 5

Displacement : 19 tons  
Dimensions : 55½ × 12 × 4 feet  
Guns : 1—20 mm. AA.  
Speed : 11 kts.

Note.—All launched 1944.

### Mining Tenders (Minutläggare).

MUL 14, MUL 15 (launched 1953). } Displacement : 200 tons. Speed : 10.5 kts.  
MUL 12, MUL 13 (launched 1952). }  
MUL 11 (1946). Displacement : 175 tons. Speed : 10 kts.  
MUL 10 (1939). Displacement : 158 tons. Speed : 9.5 kts.  
MUL 9 (1912). Displacement : 120 tons. Speed : 9 kts.  
MUL 8 (1904-5). Displacement : 120 tons. Speed : 7.5 kts.  
MUL 3 (1879). Displacement : 190 tons. Speed : 6.5 kts.

Guns : 2—20 mm. AA.

Notes.—Manned by Coast Artillery personnel. MUL 7 discarded 1954.

### Salvage Vessel (Bärgningsfartyg). (Diving and Submarine Rescue).

#### BELOS

Launched : 1885

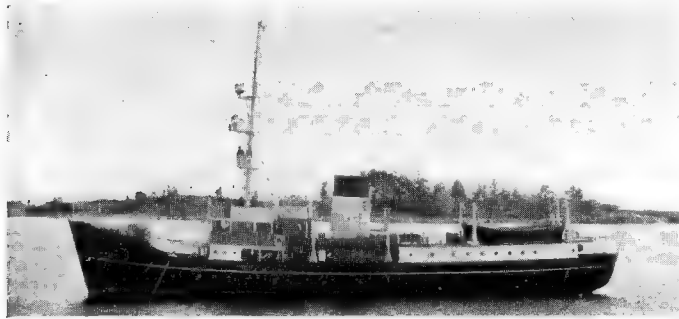
Displacement : 755 tons  
Dimensions : 167½ × 26 × 13½ feet  
Guns : 1—20 mm. AA.  
Machinery : Compound. I.H.P. : 890 = 11 kts.

Notes.—Acquired 1941. Equipment includes diving chamber and apparatus for raising sunken submarines.

## Surveying Vessels (*Sjömåtningsfartyg*).

### RAN

Launched: 1945  
Displacement: 260 tons  
Dimensions:  $98\frac{1}{2} \times 23 \times 8\frac{1}{2}$  feet



1953, Swedish Navy, Official.

### GUSTAF AF KLINT

Launched: 1941  
Displacement: 650 tons  
Dimensions:  $154 \times 28\frac{1}{2} \times 15\frac{1}{2}$  feet  
Machinery: Diesel  
Speed: 10 kts.

### KOMPASS

Launched: 1938  
Displacement: 50 tons  
Dimensions:  $55\frac{1}{2} \times 17\frac{1}{2} \times$  — feet  
Speed: 7.5 kts.

### JOHAN NORDENANCKAR

Launched: 1924  
Displacement: 210 tons  
Dimensions:  $98\frac{1}{2} \times 22\frac{1}{2} \times 6\frac{1}{2}$  feet  
Speed: 8 kts.

### PETER GEDDA

Launched: 1924  
Displacement: 135 tons  
Dimensions:  $82 \times 18 \times 7$  feet  
Speed: 6 kts.

### EJDERN

Launched: 1916  
Displacement: 80 tons  
Dimensions:  $78\frac{1}{2} \times 15\frac{1}{2} \times 7\frac{1}{2}$  feet  
Speed: 8 kts.

### SVENSKSUND

Launched: 1891  
Displacement: 415 tons  
Dimensions:  $124\frac{1}{2} \times 26 \times 12$  feet  
Guns: 2—57 mm., 1—20 mm.  
Machinery: H.P.: 400 = 12 kts.  
Coal: 50 tons

Note.—Reconstructed in 1942.

### SVALAN

Launched: 1881  
Displacement: 140 tons  
Dimensions:  $101\frac{1}{2} \times 17\frac{1}{2} \times 9$  feet  
Speed: 8 kts.

## Landing Craft.

L 51	L 52	L 53	L 54	L 55
	Displacement: 30 tons			
	Dimensions: $46 \times 15\frac{1}{2} \times$ — feet			
ANE	BALDER	LOKE	RING	
	Displacement: 135 tons			
	Dimensions: $91\frac{1}{2} \times 26\frac{1}{2} \times$ — feet			

## Tenders.

<b>STARKODDER</b> (ex-Graham)	<b>STYRBJÖRN</b> (ex-Klo)
Displacement: 375 and 350 tons, respectively	
Dimensions: $100 \times 23 \times 14$ feet, and $104\frac{1}{2} \times 22 \times 14$ feet, respectively	
Guns: 1—20 mm. AA., 1 M.G.	
Machinery: Reciprocating. I.H.P.: 750 = 11 and 10.5 kts., respectively	

Notes.—Ex-whalers, built in Norway, launched 1925 and 1923, respectively, purchased in 1935.

### SVEPAREN

Displacement: 185 tons  
Dimensions:  $85\frac{1}{2} \times 23 \times 10$  feet  
Guns: 1—25 mm., 1 M.G.  
Machinery: H.P.: 400 = 10 kts.  
Complement: 18

### SPRANGAREN

Notes.—Launched 1917-18. Pendant Nos. are now 48 and 49, respectively, which have been painted on bows. Sökaren sank 4 Oct., 1953, after grounding at Saltsjöbadeb, 10 miles south of Stockholm.

## Oilers (*Tankfartyg*).

### TANKAREN (ex-Lister)

Launched: 1941  
Measurement: 300 tons deadweight  
Dimensions:  $118 \times 22 \times$  — feet  
Speed: 10 kts.



1947 Official

### OLJAREN (ex-Martha)

Launched: 1939  
Displacement: 1,100 tons (695 tons cargo capacity)  
Dimensions:  $179 \times 28 \times 11$  feet  
Guns: 2—25 mm. AA.  
Speed: 9 kts.

### ELDAREN (ex-Muron)

Launched: 1938  
Displacement: 875 tons (535 tons cargo capacity)  
Dimensions:  $169 \times 25\frac{1}{2} \times 10$  feet  
Guns: 2—25 mm. AA.  
Speed: 9.5 kts.

### BRÄNNAREN

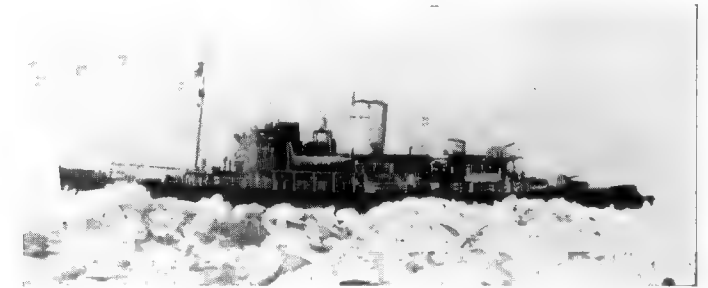
Builders: Kockums M.V. A/B., Malmö  
Launched: 1933  
Displacement: 1,100 tons (610 tons cargo capacity)  
Dimensions:  $165$  (pp.),  $173$  (o.a.)  $\times 29 \times 12$  feet  
Guns: 2—25 mm. AA.  
Machinery: Atlas Diesels. H.P.: 500 = 10 kts.

## Icebreakers (*Isbrytarfartyg*).

### THULE

Builders: Royal Swedish Naval Dockyard, Karlskrona  
Launched: 1951  
Displacement: 1,900 tons (2,200 tons full load)  
Dimensions:  $187$  (w.l.),  $204\frac{1}{2}$  (o.a.)  $\times 50 \times 17\frac{1}{2}$  (max.)  
Machinery: Diesel-electric. 3 shafts (1 forward). B.H.P.: 4,500-5,500 = 16-17 kts.

Notes.—Another new icebreaker of 5,000 tons, 10,500 H.P. = 17 kts. is under construction.



YMER.

1953, Swedish Navy, Official.

### YMER

Builders: Kockums M.V. A/B., Malmö  
Launched: 1933  
Displacement: 3,465 tons (1,500 tons full load)  
Dimensions:  $240$  (w.l.),  $258$  (o.a.)  $\times 63\frac{1}{2} \times 21$  feet  
Guns: 4—3 inch AA., 2—40 mm. AA., 4—25 mm. AA.  
Machinery: 6 Atlas Diesels driving electric generators. H.P.: 9,000 = 16 kts.  
Complement: 44

Note.—Ymer was first large icebreaker to be given Diesel-electric propulsion.



1949, Official.

### ATLE

Launched: 1926  
Displacement: 1,750 tons (2,400 tons full load)  
Dimensions:  $194\frac{1}{2}$  (w.l.),  $207$  (o.a.)  $\times 55\frac{1}{2} \times 20\frac{1}{2}$  feet  
Guns: 4—57 mm. AA., 4 M.G.  
H.P.: 4,000 = 15 kts.  
Complement: 44

## Sail Training Ships (*Skonerter*).

### FALKEN (June 12, 1947)

Displacement: 220 tons  
Dimensions:  $93$  (w.l.)  $129\frac{1}{2}$  (o.a.)  $\times 23\frac{1}{2} \times$  — feet  
Machinery: Auxiliary Diesel of 50 B.H.P.

### GLADAN (Nov. 14, 1946)

Displacement: 220 tons  
Dimensions:  $93$  (w.l.)  $129\frac{1}{2}$  (o.a.)  $\times 23\frac{1}{2} \times$  — feet  
Machinery: Auxiliary Diesel of 50 B.H.P.

Notes.—Schooners. Launch dates above.

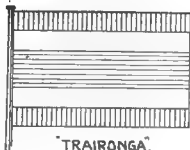


# ROYAL THAI NAVY

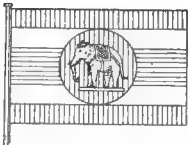
## Flags.



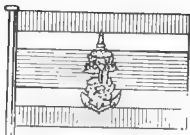
ROYAL STANDARD.



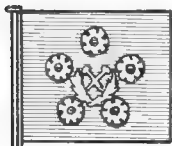
"TRAIRONGA".  
NATIONAL FLAG.



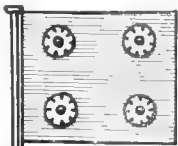
NAVAL ENSIGN.



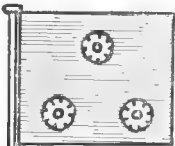
JACK



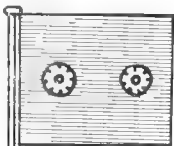
ADMIRAL OF THE  
FLEET



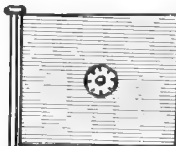
ADMIRAL



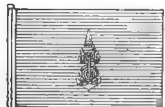
VICE-ADMIRAL



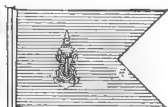
REAR-ADMIRAL



COMMODORE



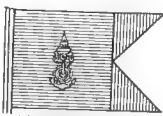
COMMANDER-IN-CHIEF.



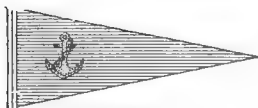
FLEET COMMANDER.



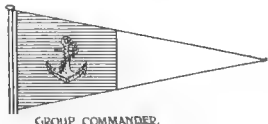
SQUADRON  
COMMANDER



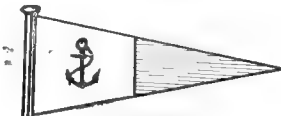
COMMANDING OFFICER  
of a SHORE STATION.



DIVISION COMMANDER.



GROUP COMMANDER.



SENIOR OFFICER



PENDANT.



## Administration.

Minister of Defence : Admiral of the Fleet Plaek Pibulsonggram.

Commander-in-Chief of Navy : Vice-Admiral Luang Yuthasastra Kosol

Chief of Naval Staff : Vice-Admiral Luang Yuthasastra Kosol

Naval Attaché, London : Captain Sawasdi Kongsiri

## Personnel.

1954: 1,100 officers and 10,000 ratings.

## Uniforms.



Admiral  
of the  
Fleet

Admiral

Vice-  
Admiral

Rear-  
Admiral

Commodore

Captain

Commander

Lieut.-  
Commander

Senior  
Lieutenant

Junior  
Lieutenant

Sub-  
Lieutenant

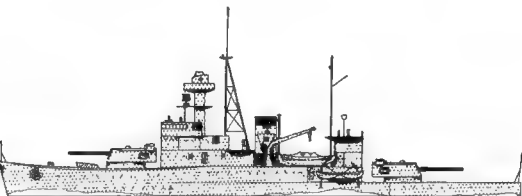
## Silhouettes.



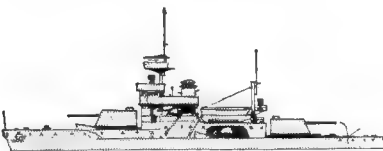
PRASAE, TACHIN.



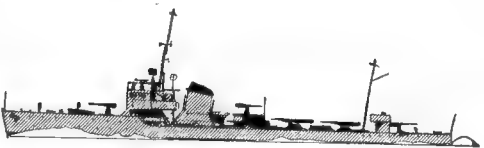
MAEKLONG.



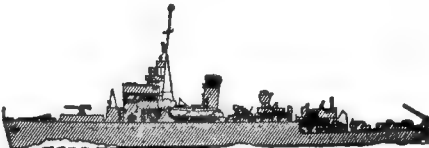
SRI AYUTHAYA Class.



RATANAKOSINDRA.



TRAD Class.



PHOSAMTON.



PRA RUANG.



CHOW PRAYA

Frigates.



TACHIN.

1953, Royal Thailand Navy Official.

PRASAE (Ex-U.S.S. Gallup, PF 47).

Displacement : 1,430 tons (2,100 tons full load)  
Dimensions : 304 (o.a.)  $\times$  37  $\frac{1}{2}$   $\times$  13  $\frac{3}{4}$  (max.) feet  
Guns : 3—3 inch, 50 cal. d.p. ; 10—40 mm. and 20 mm. AA.  
Machinery : Triple expansion, 2 shafts. I.H.P. : 5,500 = 20 kts.  
Complement : 180

TACHIN (Ex-U.S.S. Glendale, PF. 36).

Notes.—Former United States patrol frigates. Built by Consolidated Steel Corporation, Los Angeles. Laid down 18 Aug. and 6 Apr., 1943, launched 17 Sept. and 28 May, 1943, completed 29 Feb., 1944 and 1 Oct., 1943, respectively. Delivered to Royal Thailand Navy, 29 Oct., 1951. Of similar design to British frigates of "River" class. Present pendant Nos. 1 and 2.



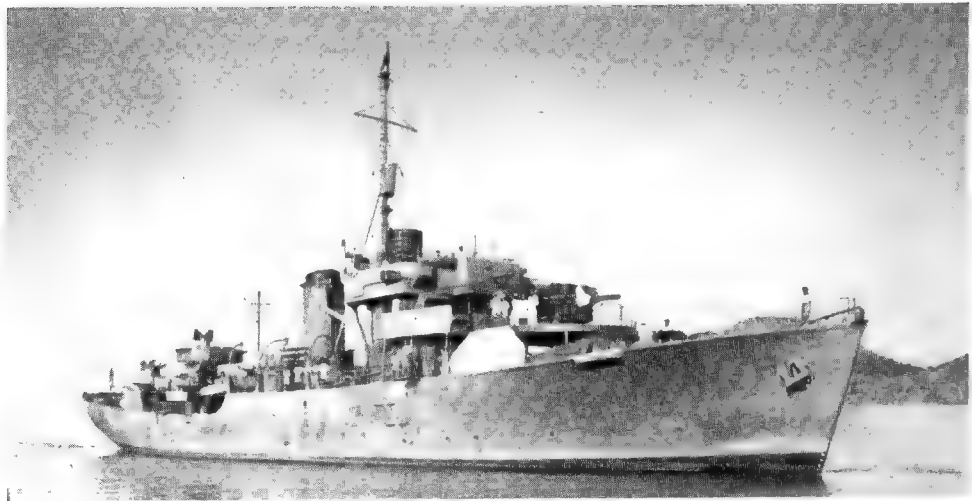
MAEKLONG

1952, Official.

Displacement : 1,400 tons  
Dimensions : 269  $\times$  34  $\frac{1}{2}$   $\times$  10  $\frac{1}{2}$  (mean) feet  
Guns : 4—4.7 inch, 2—40 mm. AA., 2—20 mm. AA.  
Tubes : 4—18 inch  
Machinery : Triple expansion, 2 shafts. I.H.P. : 2,500 = 14 kts.  
Boilers : 2 water-tube  
Oil fuel : 487 tons  
Complement : 155 (as training ship)

Notes.—Built by Uraga Dock Co. Launched 27 Nov. 1936. Delivered in June, 1937. Fitted for minesweeping. Employed as training ship.

Frigates—continued.



BANGPAKONG.

Added 1951 Royal Thai Navy Official.

BANGPAKONG (ex-Gondwana, ex-Burnet)

Builders : Ferguson Bros., Ltd., Port Glasgow  
Launched : 31 May, 1943

Displacement : 1,060 tons (1,350 tons full load)  
Dimensions : 193 (pp.), 203  $\frac{1}{2}$  (o.a.)  $\times$  33  $\times$  13  $\frac{3}{4}$  (mean) feet  
Guns : 1—4 inch, 7—20 mm. AA.  
A-S Weapons : 4 D.C.T.  
Machinery : Triple expansion. I.H.P. : 2,880 = 16 kts.  
Boilers : 2, of 3-drum type  
Oil fuel : 282 tons  
Complement : 101 (129 war)

Notes.—Former British corvette of the "Flower" class which served in the Indian Navy before she was transferred to Thailand. Sister ship *Prasae* ran aground heavily on the East coast of Korea two miles north of the 38th Parallel while engaging in the bombardment of the enemy shore bases behind the North Korean lines on 7th January, 1951, and had to be destroyed by the United Nations Fleet on 13th January.

Training Ship (ex-Destroyer).

PRA RUANG (ex-H.M.S. Radiant)

Builders : John I. Thornycroft & Co., Ltd., Woolston, Southampton  
Launched : 5 Nov., 1916

Displacement : 1,035 tons  
Dimensions : 274 (o.a.), 265 (pp.)  $\times$  27  $\frac{1}{2}$   $\times$  11 (max.), 8  $\frac{1}{2}$  (mean) feet  
Guns : 3—4 inch, 2—40 mm. AA., 2—20 mm., 1 M.G.  
Tubes : 4—21 inch, in two twin deck mountings.  
Machinery : Brown-Curtis geared turbines, 2 shafts. S.H.P. 29,000 = 35 kts. (now much less)  
Boiler : 3 Yarrow  
Oil fuel : about 285 tons (max.)  
Complement : 100

Notes.—Former British destroyer. Purchased July, 1920.

THAILAND—Coast Defence Ship, Armoured Gunboat, Torpedo Boats

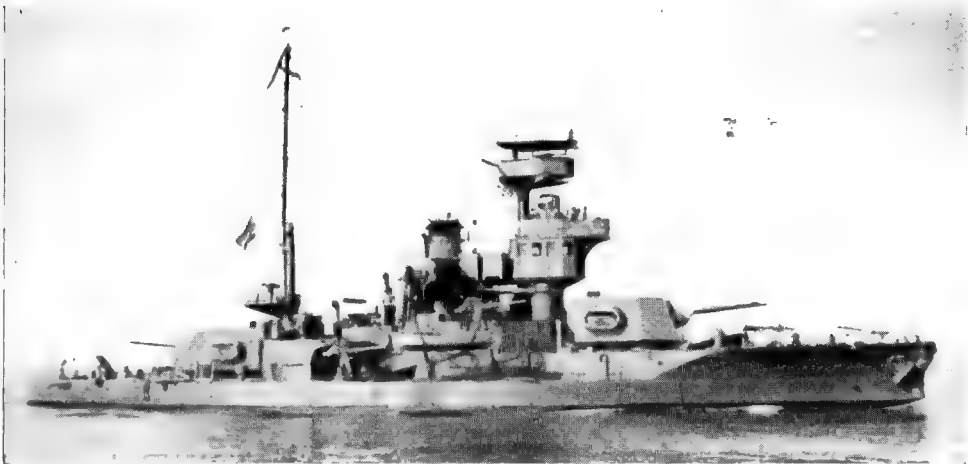
Coast Defence Ship.

THONBURI

Builders :	Kawasaki Co., Kobe
Laid down :	1936
Displacement :	2,015 tons
Dimensions :	246 × 47½ × 13½ feet
Guns :	4—8 inch, 4—3 inch AA., 4—40 mm. AA.
Armour :	2½" side, 1½" deck
Machinery :	2 sets M.A.N. Diesels. 2 shafts. B.H.P. : 5,200 = 15.5 kts.
Oil fuel :	150 tons
Complement :	155

Notes.—Apparently an expansion of *Ratanakosindra* design. *Thonburi*, launched 31 Jan., 1938, in action off Koh Chang in 1941, with a French squadron including the cruiser *Lamotte-Picquet*, was heavily damaged and driven ashore. Though her hull was salvaged, she is not in service and is officially described as decommissioned. *Sri Ayuthaya*, launched 31 July, 1937, reported to have been sunk 3 July, 1951. It is officially stated that she is still under consideration to be raised.

Armoured Gunboat.



RATANAKOSINDRA.

1950 Royal Thai Navy, Official.

RATANAKOSINDRA

Builders :	Armstrong
Laid down :	29 Sep., 1924
Launched :	21 Apr., 1925
Completed :	Aug., 1925
Displacement :	886 tons (1,000 tons full load)
Dimensions :	160 (pp.), 173 (o.a.) × 37 × 10½ feet
Guns :	2—6 inch, 4—3 inch AA., 2—40 mm. AA., 2—20 mm. AA.
Armour :	Side 2½" (amidships), 1½" ends, nickel steel : barbettes rings, 2½" nickel steel ; C.T., 4½" cast steel armour ; Upper deck, 1½"–2" high tensile steel
Machinery :	Triple expansion. 2 shafts. I.H.P. : 850 = 12 kts.
Boilers :	2 oil-burning water-tube, working pressure 225 lbs.
Oil fuel :	96 tons
Complement :	103

Note.—*Sukhothai*, launched by Vickers-Armstrong, 19 Nov., 1929 and completed in 1930, was of similar design.

Torpedo Boats.



SURASDRA.

1950, Royal Thai Navy, Official.

TRAD (No. 11, Oct. 26, 1935)

PUKET (No. 12, Sept. 28, 1935)

PATTANI (No. 13, Oct. 16, 1936)

SURASDRA (No. 21, Nov. 28, 1936)

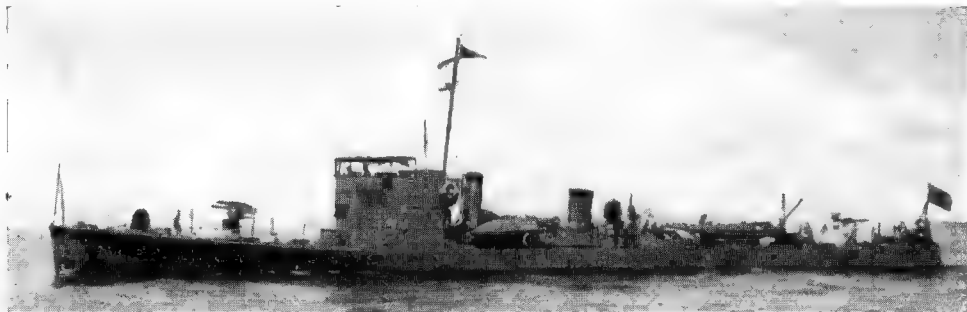
CHANDABURI (No. 22, Dec. 16, 1936)

RAYONG (No. 23, Jan. 11, 1937)

CHUMPHORN (No. 31, Jan. 18, 1937)

Displacement :	318 tons standard (470 tons full load)
Dimensions :	219 (pp.), 223 (o.a.) × 21 × 7 (max.) feet
Guns :	3—3 inch AA., 2—20 mm. AA., 4—8 mm.
Tubes :	6—18 inch (2 single, 4 paired)
Machinery :	Parsons geared turbines. 2 shafts. H.P. : 9,000 = 31 kts.
Boilers :	Yarrow
Oil fuel :	102 tons
Radius :	1,700 miles at 15 kts.
Complement :	70

Notes.—First 2 laid down Feb. 8, 1935, by Cantieri Riuniti dell'Adriatico, Monfalcone, for delivery by end of 1935. Launch dates above. Armament supplied by Vickers-Armstrongs, Ltd. First boat reached 32.54 kts. on trials with 10,000 H.P. All delivered by summer of 1937. *Cholburi* and *Songkhla* were sunk in action with a French squadron on Jan. 17 1941. Reported that only three of these boats remain. It is planned to convert them to anti-submarine warfare vessels.



TAKBAI.

1950, Royal Thai Navy, Official.

KANTANG (No. 7)

KLONGYAI (No. 5)

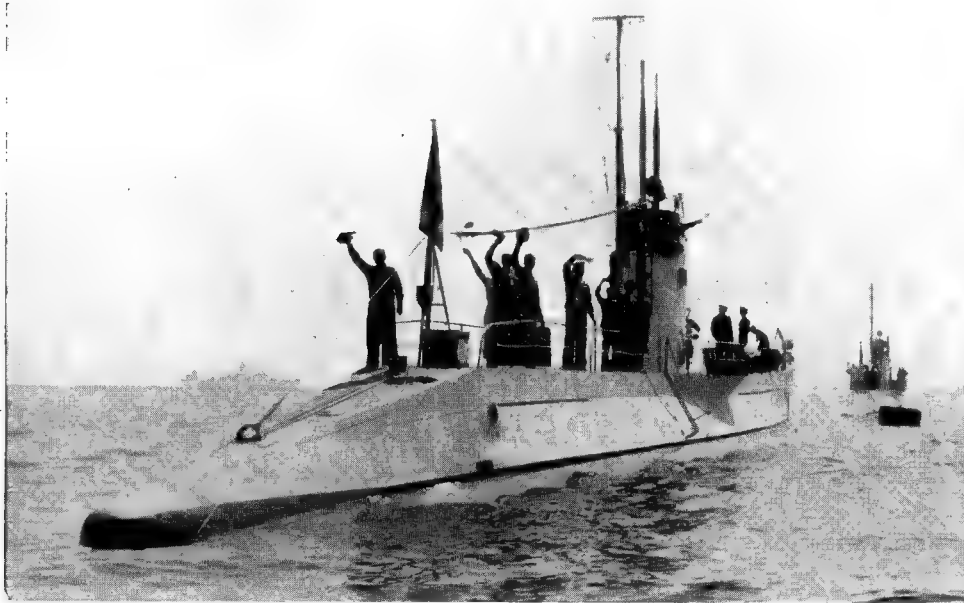
TAKBAI (No.)

Displacement :	110 tons standard (135 tons full load)
Dimensions :	131½ × 15½ × 4 feet
Guns :	1—3 inch, 1—20 mm.
Tubes :	2—18 inch
Machinery :	Geared turbines. 2 shafts. S.H.P. : 1,000 = 19 kts.
Boilers :	2 water-tube
Oil fuel :	18 tons
Complement :	31

Notes.—Built by Isaikawazima Co., launched March 26, 1937. Completed June 21, 1937.

## Submarines.

### 4 "Majchanu" Class.



PLAI CHUMPOL.

1938.

MAJCHANU	PLAI CHUMPOL	SINSAMUT	WIRUN
Displacement :	370 tons standard		
Dimensions :	167½ × 13½ × 12 feet		
Guns :	1—3 inch		
Tubes :	4—18 inch		
Machinery :	Diesels. B.H.P. : 1,000 = 14.5 kts. surface ; electric motors, H.P. : 540 = 8 kts. submerged		
Oil fuel :	27 tons		
Radius :	3,000 miles at 10 kts. (surface)		
Complement :	24		

Notes.—Reported to be in poor condition. It is officially stated that all the above submarines have been decommissioned.

Name	Builders	Laid down	Launched
Majchanu	} Mitsubishi	6 Apr., 1936	24 Dec., 1936
Plai Chumpol		1 Oct., 1936	14 May, 1936
Sinsamut		1 Oct., 1936	14 May, 1936
Wirun		6 Apr., 1936	24 Dec., 1936

## Coastguard Vessels.

### 4 New Construction.

Displacement :	95 tons
Dimensions :	Length 95 feet
Machinery :	4 diesels. 2 shafts. B.H.P. : 2,200 = 21 kts.
Radius :	1,500 miles cruising range
Complement :	15

Notes.—New coast guard cutters transferred to Thailand 1954. Similar to 12 new C.G.C. built for U.S.C.G. Built by U.S. Coast Guard Yard, Curtis Bay, Maryland, 1953. Cost \$475,000 each.

## Ocean Minesweeper.

### 1 "Algerine" Class.



PHOSAMTON.

1953. A. &amp; J. Pavia

### PHOSAMTON (ex-H.M.S. Minstrel)

Builders :	Redfern Construction Co.
Launched :	5 Oct., 1944
Displacement :	1,040 tons
Dimensions :	225 (pp.), 235 (o.a.) × 35½ × 10½ feet
Machinery :	Triple expansion. 2 shafts. I.H.P. : 2,000 = 16 kts.
Boilers :	2, of 3-drum type
Complement :	103

Notes.—Former British "Algerine" class minesweeper of oceangoing type capable of fleet sweeping and escort duties.

## Training Ship (ex-Fleet Minesweeper).

### CHOW PRAYA (ex-H.M.S. Havant)

Builders :	Eltringhams, S. Shields
Launched :	Nov., 1918
Displacement :	669 tons (840 tons full load)
Dimensions :	220 × 28½ × 7½ feet
Guns :	2—57/40 mm. AA., 1—40 mm. AA.
Machinery :	Vertical triple expansion. 2 shafts. I.H.P. : 2,200 = 16 kts.
Boilers :	Yarrow, converted to burn oil
Oil fuel :	160 tons
Complement :	65

Notes.—Former British fleet minesweeper. Purchased 1923 and reconstructed by Messrs. Thornycroft. Guns interchangeable for training. For appearance see silhouette on earlier page.

THAILAND—M.T.B.s, Minesweepers, Minelayers, Patrol Vessels

Motor Torpedo Boats.

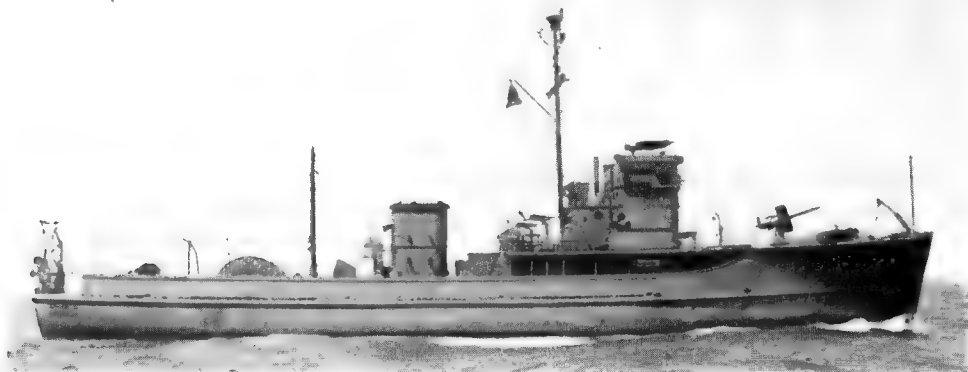


CMB No. 10. 1950, Royal Thai Navy, Official.

No. 8	No. 9	No. 10	No. 11	No. 12
Displacement :		16 tons		
Machinery :		B.H.P. : 750 = 40 kts.		
Armament :		2 M.G., 2—18 inch torpedoes, 2 D.C.		

Notes.—Thornycroft type. Launched 1935 to 1937. Built and equipped at Royal Siamese Naval Dockyard, Bangkok, and engined by Messrs. Thornycroft. Rated as Coastal Motor Boats.

Motor Minesweepers.

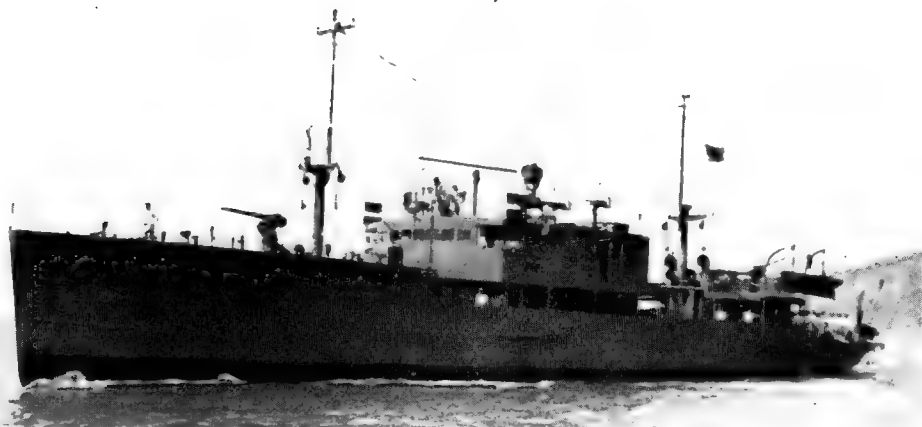


LADYA. 1950, Royal Thai Navy, Official.

BANGKEO (ex-YMS 334)	LADYA (ex-YMS 138)	TA DINDENG (ex-YMS 21)
Displacement :		
300 tons (325 tons full load)		
Dimensions :		
136 × 24½ × 6 feet		
Guns :		
1—3 inch, 2—20 mm. AA.		
Machinery :		
G.M. Diesel, 2 shafts. B.H.P. : 1,000 = 15 kts.		
Complement		
51		

Notes.—Former United States motor minesweepers of YMS type. Hull is of wooden construction.

Coastal Minelayers.

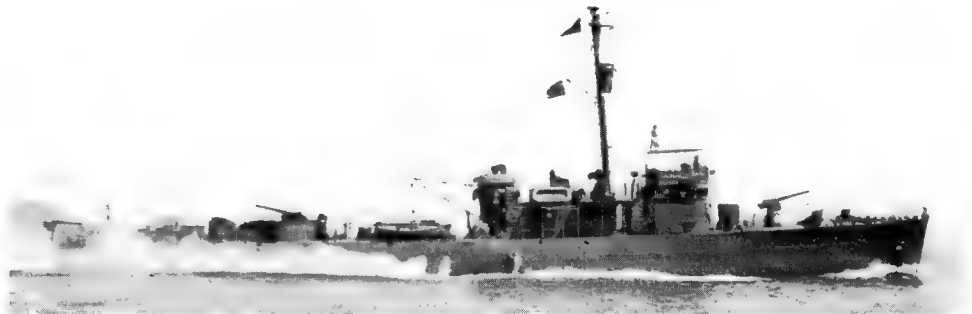


BANGRACHAN. 1950, Royal Thai Navy Official.

BANGRACHAN (No. 1)	NHONG SARHAI (No. 2)
Displacement :	
368 tons standard (408 tons full load)	
Dimensions :	
160½ × 26 × 7½ feet	
Guns :	
2—3 inch AA., 2—20 mm. AA.	
Machinery :	
Burmeister & Wain diesel engines. Oil fuel 18 tons. 2 shafts. B.H.P. : 540 = 12 kts.	
Complement	
55	

Notes.—Built by Cant. Riuniti dell' Adriatico, Monfalcone. Launched 1936 and July 22 1936 respectively. Can carry 142 mines.

Patrol Vessels.



SARASIN. 1950 Royal Thai Navy, Official.

KHAMRONSIN (ex-PC 609)	PHALI (ex-PC 1185)	SUKRIP (ex-PC 1218)
LIULOM (ex-PC 1253)	SARASIN (ex-PC 495)	THAYANGHON (ex-PC 575)
LONGLOM (ex-PC 570)		TONGPLIU (ex-PC 616)
Displacement :		
280 tons (300 tons full load)		
Dimensions :		
174 (o.a.) × 23½ × 6 feet		
Guns :		
1—3 inch AA., 1—40 mm. AA., 5—20 mm. AA.		
Machinery :		
Diesel, 2 shafts. B.H.P. : 3,600 = 19 kts.		
Complement		
62 to 71		

Notes.—Former United States patrol vessels of PC type. Launched 1941-43 Used to prevent smuggling, and as anti-submarine boats.



# Motor Patrol Boats.

## THIOW UTHOK

Displacement : 50 tons  
Dimensions : 72 × 13 × 3½ feet  
Guns : 1—20 mm.  
Machinery : Diesel. Oil fuel 5 tons. 2 shafts. B.H.P.: 150 = 9 kts.

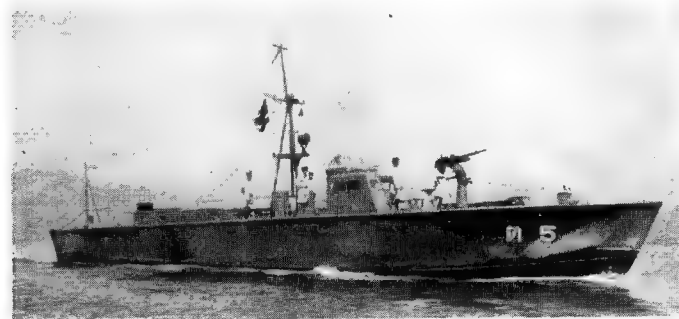
Notes.—Launched 1936. Built in Bangkok, to Italian design. Used for fishery protection.

## No. 11

Displacement : 44.5 tons  
Dimensions : 83½ × 16 × 4½ feet  
Guns : 1—20 mm. AA.  
Machinery : 2 Viking petrol engines. B.H.P. : 1,300 = 20.5 kts.

Notes.—Former U.S. Coast Guard cutters of YP class. Wooden hulled construction.

## No. 12



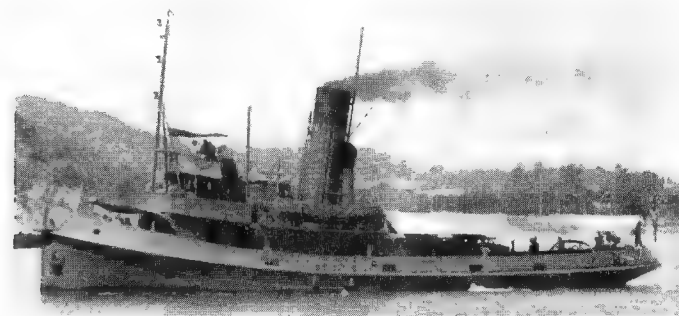
MPB No. 5. 1950, Royal Thai Navy, Official.

## No. 1 No. 2 No. 3 No. 4 No. 5 No. 6

Displacement : 16 tons  
Guns : 1—20 mm. AA.  
Machinery : Gray Marine engines. Speed : 12.5 kts.

Note.—Built and equipped at Royal Thai Naval Dockyard, Bangkok, and engined by Gray.

# Fleet Tug.



1950, Royal Thai Navy, Official.

## SAMAESAN (ex-Empire Vincent).

Builders : Cochrane & Sons, Ltd., Selby, Yorks, England.  
Displacement : 503 tons (full load)  
Dimensions : 105 × 26½ × 13 feet  
Machinery : Triple expansion. I.H.P. : 850 = 10.5 kts.  
Complement : 27

# Despatch Vessel.

## SAMED (ex-Pi-Sua-Nam)

Launched : 1906  
Displacement : 129 tons  
Dimensions : 100 × 20 × 8½ (mean) feet  
Machinery : Triple expansion. I. H.P. : 210 = 9 kts.  
Complement : 26

Note.—Acquired in 1918.

# Transports.

## SURIYA (ex-Thalang)

Displacement : 920 tons  
Dimensions : 175 × 34½ × 16½  
Speed : 10 kts. (approx.)  
Complement : 76

Note.—Used for various purposes including occasional surveying duties.



1953, Royal Thai Navy, Official.

## PA—NGAN

Displacement : 815 tons  
Dimensions : 160 × 28 × 16 feet  
Machinery : Diesel. 2 shafts. B.H.P. : 550 = 16 kts.  
Complement : 30

Notes.—Built by Harima Co., Japan. Sichang launched 10 Nov. 1937. Completed in Jan. 1938. Sichang is with U.N. fleet.

## SICHANG

## KLED KEO

Launched : 1933  
Displacement : 180 tons  
Dimensions : 115 × 16 × 6 feet  
Machinery : Diesel. 2 shafts. B.H.P. : 300 = 8 kts.  
Complement : 23

## CHANG (ex-Vides Kichkar, ex-Buk, ex-Lycidas)

Builders : Ritson & Co., Maryport  
Launched : 1902  
Displacement : 850 tons  
Dimensions : 176 × 27½ × 10 feet  
Machinery : H.P. : 780 = 9 to 10 kts.

## CHUANG (ex-Pra-Yam)

Displacement : 190 tons  
Dimensions : 110 × 18 × 8 (mean) feet  
Machinery : H.P. : 225 = 10 kts.  
Complement : 30

## KRAM (ex-Chen Thale)

Builders : Hongkong and Whampoa Dock Co.  
Launched : 1902  
Measurement : 440 tons gross  
Dimensions : 160 × 27 × — feet  
Machinery : I.H.P. : 330 = 8 kts.

Note.—Used for various purposes, including occasional surveying duties.

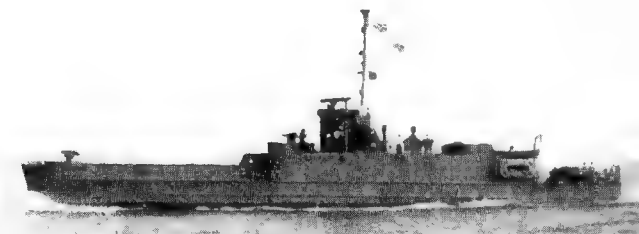
# Transports (ex-Landing Craft).

## KUT (ex-LSM)

Displacement : 912 tons  
Dimensions : 203½ × 23 × 8 feet  
Machinery : Diesel. 2 shafts. B.H.P. : 1,800 = 10 kts.  
Complement : 55

## PHAI (ex-LSM)

Displacement : 912 tons  
Dimensions : 203½ × 23 × 8 feet  
Machinery : Diesel. 2 shafts. B.H.P. : 1,800 = 10 kts.  
Complement : 55



PRAP

1950, Royal Thai Navy, Official.

## PRAP (ex-LCI)

Displacement : 387 tons (full load)  
Dimensions : 157 × 23 × 6 feet  
Guns : 2—20 mm. AA.  
Machinery : Diesel. 2 shafts. B.H.P. : 1,320 = 14 kts.  
Complement : 54

## SATAKUT (ex-LCI)

Displacement : 387 tons (full load)  
Dimensions : 157 × 23 × 6 feet  
Guns : 2—20 mm. AA.  
Machinery : Diesel. 2 shafts. B.H.P. : 1,320 = 14 kts.  
Complement : 54



MATAPHON.

1950, Royal Thai Navy, Official.

## ADANG KOLAM

## MATAPHON PETRA

## RAVI TALIBONG

## TONGKEO TONGLANG

Displacement : 134 tons (279 tons full load)  
Dimensions : 112 × 32 × 4 feet  
Machinery : Diesel. 3 shafts. B.H.P. : 675 = 10 kts.  
Complement : 37

Note.—Former tank landing craft. Tonkeo and Tonglang, ex-British LCT, newly commissioned

# Oilers.

## SAMUI (ex-YOG type)

Displacement : 422 tons  
Dimensions : 174½ × 32 × 15 feet  
Machinery : Diesel. 2 shafts. B.H.P. : 600 = 8 kts.  
Complement : 49

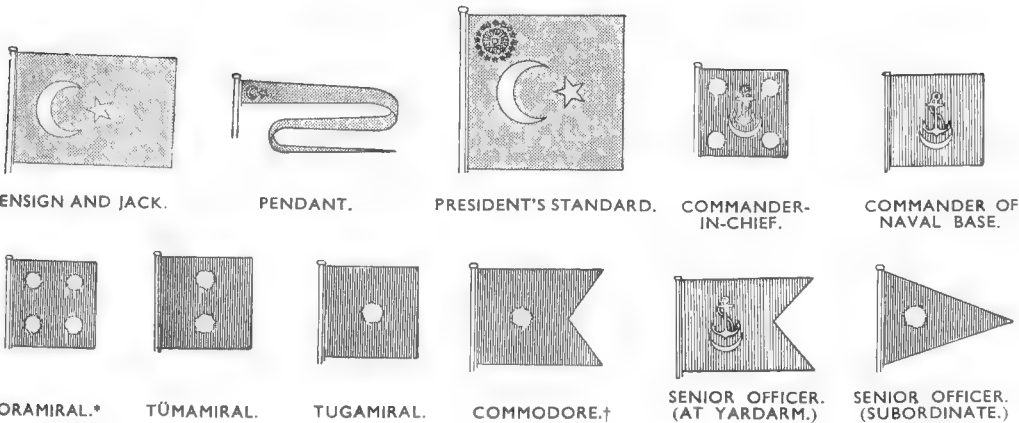
## PRONG

Launched : 1938

Displacement : 150 tons  
Dimensions : 95 × 18 × 7½ feet  
Machinery : Diesel. B.H.P. : 150 = 10 kts.  
Complement : 14

TURKISH NAVY

Flags.



\* Koramiral has 3 balls. † Commodore 1st class has 3 balls, if Albay 2, and if Yarbay 1.

Administration.

Minister of National Defence : Bay Kenan Yilmaz  
Commander, Turkish Naval Forces : Koramiral Sadık Altıncan  
Chief of Staff to Commander, Turkish Naval Forces : Tümamiral Zeki Özak  
Commander of the Straits and the Marmara : Koramiral Ridvan Koral  
Commander-in-Chief of the Fleet : Koramiral Kemalettin Bozkurt  
Commander, Active Fleet : Tümamiral Fahri Korutürk  
Commander, Submarines : Albay Vehbi Dümer

Naval Attaché, London : Captain Mahmut Ülseven.

Ships.

All ships of the Turkish Navy are officially referred to with the prefix T.C.G.

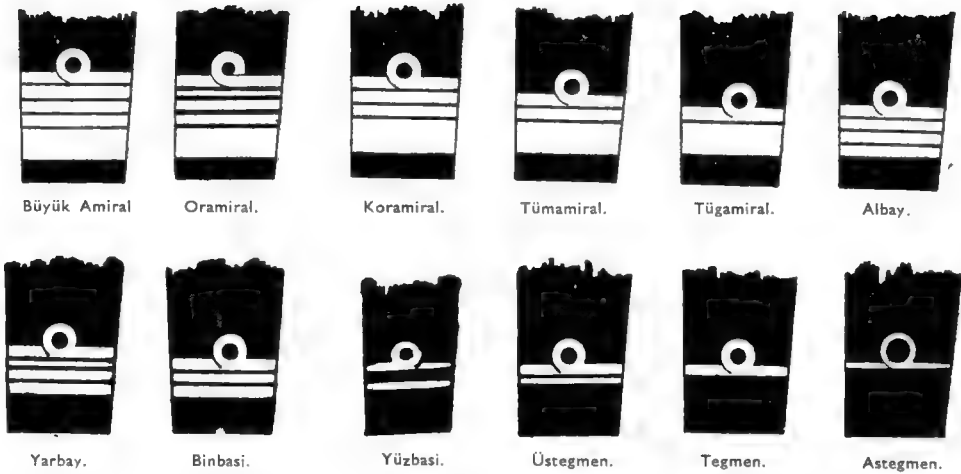
Personnel.

About 1,250 officers and 18,000 ratings.

Mercantile Marine.

Lloyd's Register appendix, 1954 : 256 vessels of 478,744 tons gross.

Uniforms.



Büyük Amiral	=	Admiral of the Fleet	Albay	=	Captain
		(Non-existent in peacetime.)	Yarbay	=	Captain (Junior)
Oramiral	=	Admiral (Senior)	Binbasi	=	Commander
Koramiral	=	Admiral	Yüzbasi	=	Lieutenant
Tümamiral	=	Vice-Admiral	Üstegmen	=	Sub-Lieutenant
Tügamiral	=	Rear-Admiral	Tegmen	=	Acting Sub-Lieutenant
			Astegmen	=	Midshipman

Insignia of Branch worn by Turkish Naval Officers.

1. Turkish naval officers, other than Executive branch, have different colours between the stripes to indicate the branch of the service to which they belong. These are :

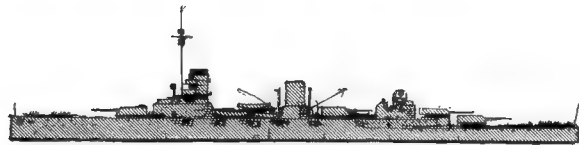
Gold Stripes	Engineer	..	Blue.	Silver Stripes	Instructor	..	Brown.
	Dockyard Engineer	..	Light blue.		Legal	..	Yellow.
	Hydrographic	..	Green.		Band	..	Brown velvet.
	Supply	..	Mauve.		Clerical	..	White.
	Medical	..	Maroon-purple				
	Dental	..	Orange.				
	Chemical	..	Dark green.				

2. Qualified Staff Officers (Executive Branch) wear no colour but have a five-pointed star above the executive curl on both sleeves and shoulder straps.

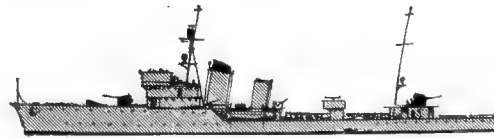
3. All officers in the Submarine Service wear on the left side of their waist a badge consisting of a submarine in white metal with yellow metal oak leaves superimposed upon it.

4. On white uniform Turkish naval officers, except Flag Officers, wear shoulder straps on which they have the stripes of their ranks with distinguishing colours between them.

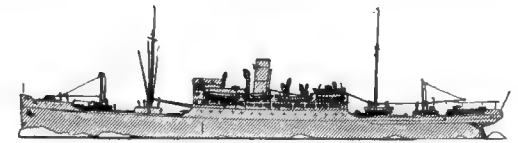
5. Flag Officers wear shoulder straps with the laurels, crossed sword and baton, and stars appropriate to their rank.



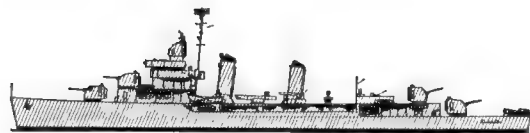
YAVUZ.



TINAZTEPE, ZAFER.



ERKIN.



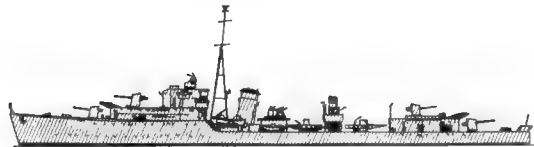
GELIBOLU Class.



ÇANDARLI Class.



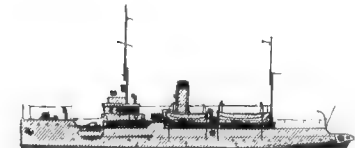
NUSRET.\*



GAYRET.



ALANYA Class.\*



KEMAL REIS.



DEMIRHISAR Class.\*



SIVRIHISAR, YÜZBAŞI HAKKI.



BARTIN.

TURKEY—Battle Cruiser and Destroyers

Battle Cruiser.

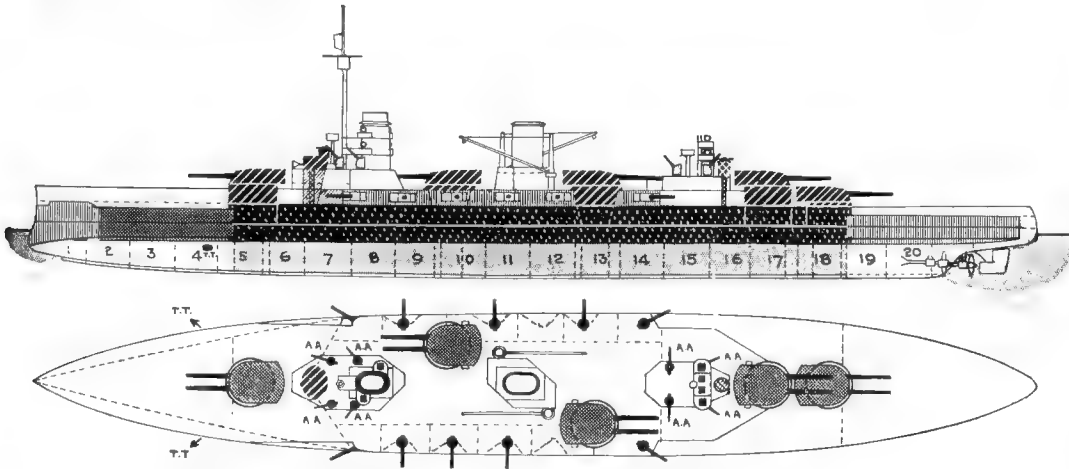


Added 1952, Mr. A. Cemalettin Saracoglu.

YAVUZ (ex-German Goeben)

Builders : Blohm & Voss, Hamburg  
Laid down : Aug., 1909  
Launched : 28 Mar., 1911  
Completed : Jul., 1912

Displacement : 22,734 tons standard  
Length : 610½ feet (w.l.). Beam : 96½ feet. Draught : 27 feet (max.)  
Dimensions : 10—11 inch, 50 cal., 10—5.9 inch, 45 cal., 8—3.5 inch AA. (83 mm.), 10—40 mm. AA., 4—20 mm. AA., 4 M.G.  
Guns : 2—19.7 inch (submerged)  
Tubes : 10½ inch belt (amidships) tapers to 6" at top and 5" below, 3½" belt (bow and stern), 9"-3" barbattes, 8" gunhouses, 5" battery, 10" fore C.T., 3" roof, 8"-3" double com. tube, 8" after C.T., 6"-3" com. tube, 3"-1" decks.  
Armour (Krupp) : 2"-1" deep H.T. steel B.H., between extramæ barbattes : minute internal subdivision  
Anci-torp. protection : Parsons turbines, direct drive. 4 shafts. S.H.P. : 52,000 = 25 kts. (now under 21 kts.)  
Machinery : 24 Schulz-Thornycroft (German "Marine" type)  
Boilers : About 1,000 tons coal normal, 3,050 tons max. + 200 tons oil  
Fuel : 1,013  
Complement



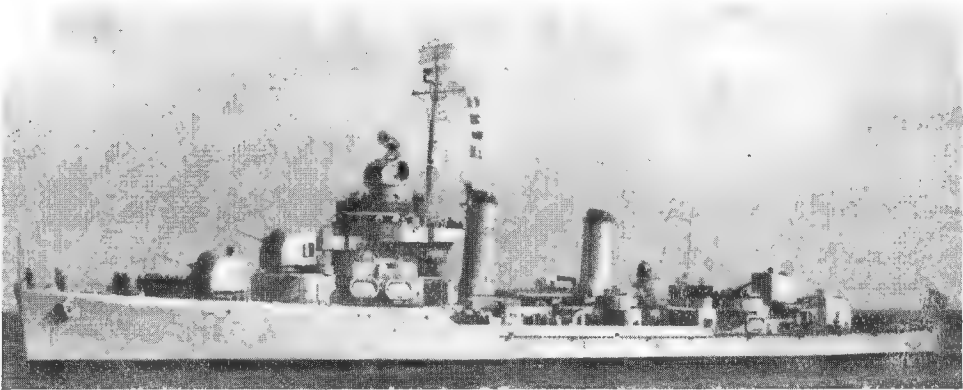
General Notes.—Begun under 1909 German Navy Programme. Transferred to the Turkish Navy in 1914, and during the first World War was twice mined, striking 5 mines in all. A contract was signed in Dec., 1926 with the Chantiers de St. Nazaire (Penhoët), for the repair and refit of this battle-cruiser at Ismid ; the work was considerably delayed owing to a floating dock proving unequal to her weight, and completion was not reached till 1930. She was again refitted in 1938. Mainmast was removed in 1941 to provide space for AA. fire control.

Gunnery Notes.—The 11-inch guns have been modified to meet present-day requirements.

Engineering Notes.—Endurance is (a) 5,350 miles at 10 kts., (b) 2,370 miles at a continuous max. sea-going speed of 23 kts. She made 26.8 kts. on trials for 6 hours, and 27.1 kts. for 4 hours, on March 17, 1930.

Destroyers.

4 "Gelibolu" Class.



GELIBOLU.

1954, A. & J. Pavia.



GEMLIK.

Added 1951, Mr. A. Cemalettin Saracoglu.

GAZIANTEP (ex-U.S.S. Lansdowne)  
GELIBOLU (ex-U.S.S. Buchanan)

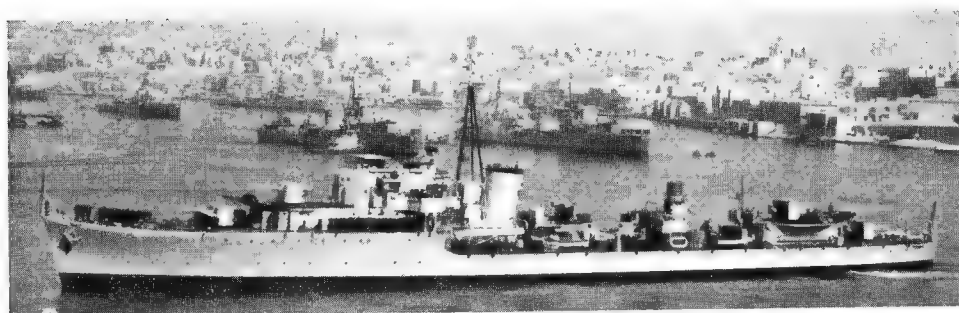
GEMLIK (ex-U.S.S. Lardner)  
GİRESUN (ex-U.S.S. McCalla)

Displacement : 1,630 tons (standard), 1,700 tons (actual), 2,500 tons (full load)  
Dimensions : 341 (w.l.), 348½ (o.a.) × 36 × 10 feet  
Guns : 4—5 inch, 38 cal., 12—40 mm. Bofors, 6—20 mm. Oerlikon  
Tubes : 5—21 inch  
Machinery : General Electric geared turbines. 2 shafts. S.H.P. : 50,000 = 36 kts  
Boilers : 4 Babcock & Wilcox  
Oil fuel : 600 tons  
Complement : 250

Notes.—Gelibolu and Giresun transferred from U.S. Navy, April 29, 1949, Gaziantep and Gemlik later same year.

No.	Name	Builders	Laid down	Launched	Completed
G.I	Gaziantep	Federal S.B. & D.D. Co.	Jul., 1941	20 Feb., 1942	29 Apr., 1942
	Gelibolu		11 Feb., 1941	22 Nov., 1941	21 Mar., 1942
	Gemlik		Jul., 1941	20 Mar., 1942	13 May, 1942
	Giresun		Jul., 1942	20 Mar., 1942	27 May, 1942

# Destroyers—continued.



1951, A. & J. Pavia.

**GAYRET** (ex-H.M.S. *Oribi*, ex-*Observer*)

Builders : Fairfield S.B. & Eng. Co., Ltd.  
Laid down : 15 Jan., 1940  
Launched : 14 Jan., 1941  
Completed : 5 Jul., 1941  
Displacement : 1,540 tons (2,290 tons full load)  
Dimensions : 338½ (pp.), 345 (o.a.) × 35 × 9 feet  
Guns : 4—4.7 inch, 1—4 inch, 4—2 pdr. pompoms, 4—20 mm. AA.  
Tubes : 8—21 inch. D.C.T. on "X" deck.  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 40,000 = 34 kts  
Boilers : 2, of 3-drum type

## 3 "Demirhisar" Class.



1954, Wright & Logan.

**DEMIRHISAR.**

**DEMIRHISAR**

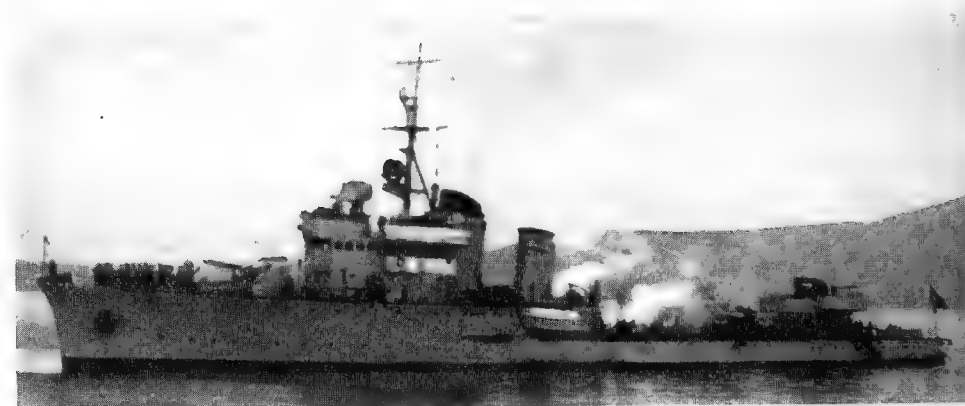
**MUAVENET** (ex-H.M.S. *Inconstant*, ex-*Muavenet*)  
Displacement : 1,360 tons (2,100 tons full load)  
Dimensions : 312 (pp.), 323 (o.a.) × 33 × 8½ (mean) feet  
Guns : 4—4.7 inch, 6—40 mm., 2—20 mm.  
Tubes : 8—21 inch (*Muavenet*, only 4)  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 34,000 = 35.5 kts  
Boilers : 3, of 3-drum type, 300 lb. working pressure  
Oil fuel : 450 tons  
Complement : 150

**SULTANHISAR**

Notes.—Only *Muavenet* has 271 Radar. *Ithuriel* (ex-*Gayret*) of this class was a war loss.

Name	Builders	Laid down	Launched	Completed
<i>Demirhisar</i>	Wm. Denny & Bros. Ltd., Dumbarton.	1939	1941	1942
<i>Muavenet</i>	Vickers-Armstrongs (Barrow).	24 May, 1939	15 Dec., 1941	24 Jan., 1942
<i>Sultanhisar</i>	Wm. Denny & Bros. Ltd., Dumbarton.	1939	1941	1942

# Destroyers—continued.



1951, Mr. A. Cemaladdin Saracoglu.

**ZAFER.**

**TINAZTEPE**

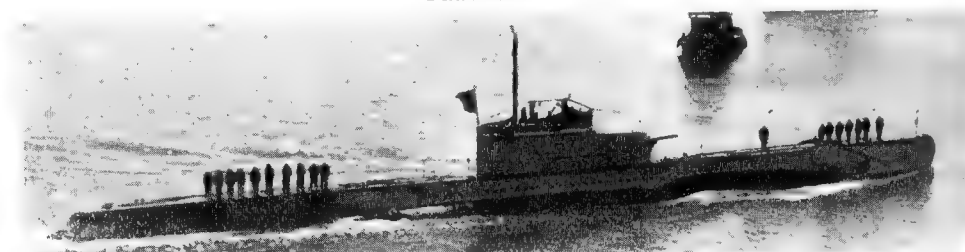
**ZAFER**

Displacement : 1,206 tons standard (1,610 tons full load)  
Dimensions : 307 (pp.), 315 (o.a.) × 30½ × 10½ feet  
Guns : 4—4.7 inch, 50 cal., 2—10 mm. AA., 2—20 mm. AA.  
Tubes : 6—21 inch in triple mountings  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 35,000 = 36 kts. (Sea speed 30 kts.)  
Boilers : 3 Thorn/croft with superheaters  
Oil fuel : 350 tons  
Complement : 149

Notes.—Of Italian type. Built at Riva Trigoso. *Zafer* is at present employed as the training ship of Heybeli Naval College.

Name	Builders	Laid down	Launched	Completed
<i>Tinaztepe</i>	C.N. del Tirreno	May, 1930	20 Jul., 1931	1932
<i>Zafer</i>	C.N. del Tirreno	May, 1930	20 Sep., 1931	1932

## Submarines.



1951, A. & J. Pavia.

**ORUC REIS.**

**BURAK REIS**

**MURAT REIS**

**ORUC REIS**

Displacement : 638 tons surface, 856 tons submerged  
Dimensions : 193 (pp.), 201½ (o.a.) × 22½ × 10½ (mean), 11½ (max.) feet  
Guns : 1—4 inch, 3 M.G.  
Tubes : 5—21 inch (4 bow, 1 stern)  
Machinery : Diesels. B.H.P. : 1,550 = 13.75 kts. surface ; H.P. : 1,300 = 9 kts. submerged.  
(*Burak Reis*, 15/10 kts.)  
Oil fuel : 40 tons

Notes.—Patrol type. Ordered March, 1939. These submarines served in British Navy as P 614, P 612, P 611 respectively, during Second World War. *Burak Reis* has no gun shield. P 615 (ex-*Akluc Ali Reis*) of this class was a Second World War loss.

Name	Builders	Laid down	Launched	Completed
<i>Burak Reis</i>	Vickers-Armstrongs, Ltd. (Barrow)	24 May, 1939	19 Oct., 1940	10 Mar., 1942
<i>Murat Reis</i>		24 May, 1939	20 Jul., 1940	7 Jan., 1942
<i>Oruc Reis</i>		24 May, 1939	19 Jul., 1940	1 Dec., 1941



TURKEY—Submarines, Ocean Minesweepers

Submarines—continued.

7 Ocean-going Type.



ÇANAKKALE.

1953, Mr. A. Cemaleddin Saracoglu.



BIRINCI İNÖNÜ.

1953, A. & J. Pavia.

**BIRINCI İNÖNÜ** (ex-U.S.S. Brill)  
**ÇANAKKALE** (ex-U.S.S. Blower)

**GUR** (ex-U.S.S. Guitarro)  
(ex-U.S.S. Chub, ex-Bonaci)  
(ex-U.S.S. Hammerhead)

**İKİNCİ İNÖNÜ** (ex-U.S.S. Blueback)  
**SAKARYA** (ex-U.S.S. Boarfish)

Displacement : 1,526 tons (standard), 1,829 tons (surface), 2,424 tons (submerged)  
Dimensions : 31½ × 27½ × 13½ feet  
Guns : 2—5 inch, 25 cal., 2—40 mm., 4 M.G.  
Tubes : 10—21 inch (6 bow, 4 stern) 24 torpedoes carried.  
Machinery : 2-stroke Diesels. B.H.P. : 6,500 = 19.5 kts. (surface), and electric motors. 9 kts. (submerged)

Notes.—All built by Electric Boat Company except *Guitarro* and *Hammerhead* by Manitowoc S.B. Co. Of all welded construction. High standard of accommodation including separate messing and sleeping compartments. *Birinci İnönü* and *İkinci İnönü* refer to the first victories gained at İnönü in Asia Minor. *Çanakkale* and *Dumlupınar*, both officially transferred in 1950, were semi-streamlined before delivery. *Dumlupınar* was lost in Dardanelles 4 April 1953. *Guitarro* and *Hammerhead* transferred 1954.

Name	Launched	Completed	Name	Launched	Completed
<i>Birinci İnönü</i>	25 Jun., 1944	26 Oct., 1944	<i>Gur</i>	7 May, 1944	28 Aug., 1944
<i>Canakkale</i>	23 Apr., 1944	10 Aug., 1944	<i>İkinci İnönü</i>	21 May, 1944	23 S p., 1944
<i>Guitarro</i>	26 S p., 1943	16 Jan., 1944	<i>Sakarya</i>	18 Jun., 1944	21 Oct., 1944
<i>Hammerhead</i>	27 Oct., 1943	1 Mar., 1944			

2 "Ay" Class.



SALDIRAY.

SALDIRAY

YILDIRAY

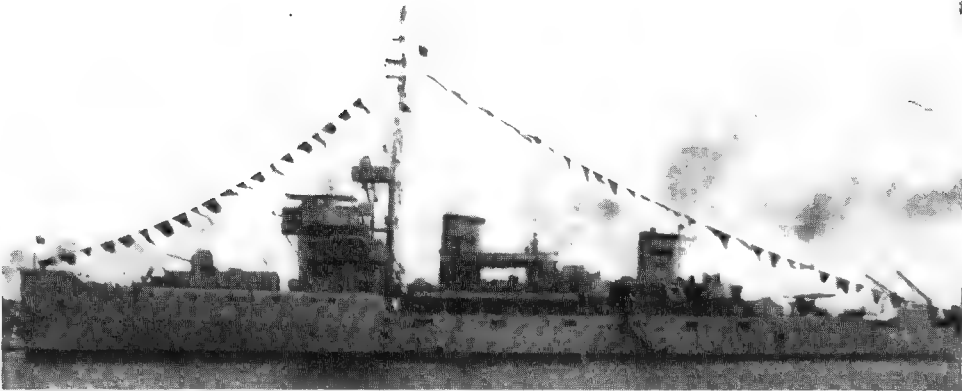
1939.

Displacement 934 tons surface, 1,210 tons submerged  
Dimensions : 26½ × 21 × 14 feet  
Guns : 1—4 inch, 1—20 mm. AA.  
Tubes : 6 (4 bow and 2 stern)  
Machinery : 2 sets Burmeister & Wain Diesels. B.H.P. : 3,500 = 20 kts. surface; 9 kts. submerged  
Diving limit : 55 fathoms  
Complement : 40

Notes.—Both Germania type. *Atilay* of this class was lost during submerged trials off Çanakkale, July 14, 1942.

Name	Builders	Laid down	Launched	Completed
<i>Saldıray</i>	Germania, Kiel	Dec., 1936	23 Jul., 1938	May, 1939
<i>Yıldıray</i>	Istanbul	Aug., 1937	26 Aug., 1939	1946

Ocean Minesweepers.



ÇANDARLI.

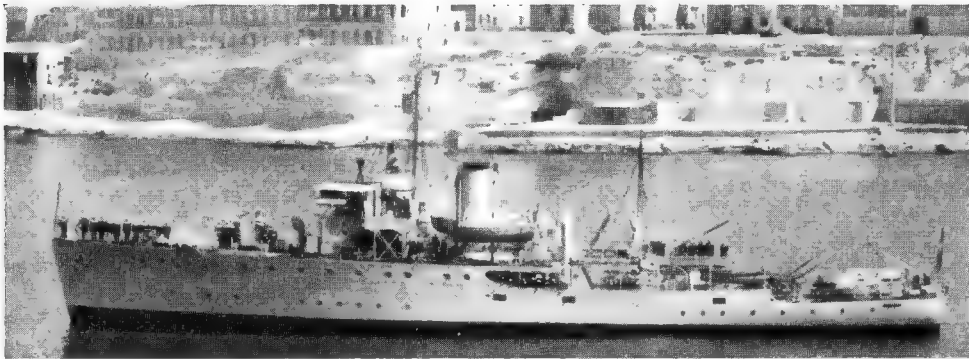
1952, Mr. A. Cemaleddin Saracoglu.

**ÇANDARLI** (ex-Frolic, July 22, 1943)  
**ÇARDAK** (ex-Taumaline, ex-Usage, Oct. 4, 1942)  
**ÇARSANBA** (ex-Tattoo, Jan. 27, 1943)  
**ÇESME** (ex-Elfreda, Jan. 25, 1943)

**EDİNCİK** (ex-Grecian, 1943)  
**EDREMIT** (ex-Chance, Nov. 28, 1942)  
**ERDEMLİ** (ex-Catharine, Sep. 7, 1943)  
**EREGLİ** (ex-Pique, ex-Celerity, Oct. 26, 1942)

Displacement : 1,110 tons (1,183 tons deep load)  
Dimensions : 215 (w.l.), 221 (o.a.) × 32 × 10½ (max.) feet  
Guns : 1—3 inch, 6—40 mm.  
Machinery : Diesel, with electric drive. 2 shafts B.H.P. : 3,500 = 18 kts.  
Complement : 105

Notes.—All U.S. built. Launch dates above. Named after Turkish ports. Vessels of "E" type have tripod mainmasts.



ALANYA.

1951, A. & J. Pavia.

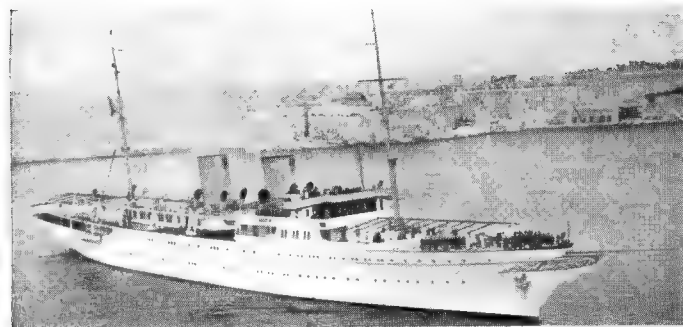
**ALANYA** (ex-Broome) **AMASRA** (ex-Pirie) **ANTALYA** (ex-Geraldton) **AYANCİK** (ex-Launceston) **AYVALIK** (ex-Gawler)

Displacement : 790 tons (1,025 tons full load)  
Dimensions : 162 (pp.), 186 (o.a.) × 31 × 8½ feet  
Guns : 1—4 inch, 1—40 mm., 4—20 mm. AA.  
Machinery : Triple expansion. 2 shafts. I.H.P. : 1,800 = 15.5 kts.  
Oil fuel : 170 tons

Notes.—All Australian built, 1940-42, acquired from Royal Navy in 1946. Named after Turkish ports. Taller mainmast in *Ayancik* and *Ayvalik*. A black band in *Ayancik* and *Amasra*, 2 black bands in *Ayvalik* and *Antalya*.

Name	Builders	Launched	Name	Builders	Launched
<i>Alanya</i>	Evans Deakin, Brisbane	6 Oct., 1941	<i>Ayancik</i>	Evans Deakin, Brisbane	30 Jun., 1941
<i>Asmara</i>	Broken Hill, Whyalla	Dec., 1941	<i>Ayvalik</i>	Broken Hill, Whyalla	Oct., 1941
<i>Antalya</i>	Poole & Steel, Sydney	16 Aug., 1941			

## Training Ship.



SAVARONA.

1953, A. & J. Pavia.

Builders : Blohm & Voss, Hamburg  
Launched : 28 Feb., 1931.

Displacement : 5,710 tons  
Dimensions : 349½ (w.l.), 408½ (o.a.) × 53 × 20½ (mean) feet  
Guns : 4—3 inch, 2—40 mm. AA., 2—20 mm. AA.  
Machinery : 6 geared turbines. 2 shafts. S.H.P. : 10,750 = 21 kts (about 18 kts. now)  
Boilers : 4 watertube, 400 lb. working pressure  
Oil fuel : 2,100 tons  
Radius : 9,000 miles at 15 kts.  
Complement : 132 + 81 midshipmen

Notes.—Formerly probably the most sumptuously fitted yacht afloat. Equipment includes Sperry gyro-stabilisers. Reconstructed and converted into a training ship for midshipmen in 1952, the saloons and dining rooms being adopted as classrooms, workshops and libraries for 120 midshipmen.

## Minelayers.

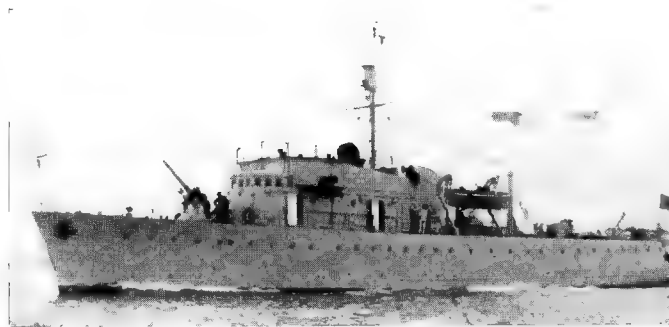
### 3 Ex-U.S. LSM Type

**MORDOGAN** (ex-LSM 484) **MARMARIS** (ex-LSM 481) **MERIC** (ex-LSM 492)

Displacement : 743 tons (1,100 tons full load)  
Dimensions : 196½ (w.l.), 203½ (o.a.) × 34½ × 8½ feet  
Guns : 2—40 mm. AA., 2—20 mm. AA.  
Machinery : Diesels. 2 shafts. B.H.P. : 2,880 = 12 kts.  
Complement : 70

Notes.—Ex-U.S. LSMs., Landing Ships Medium. All three vessels launched 1945, converted into minelayers by U.S. Navy in 1952 and taken over by the Turkish Navy in October 1952 under the Mutual Defense Assistance Program.

## Minelayers—continued.



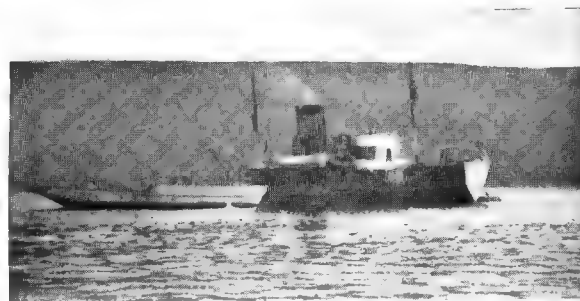
1942, courtesy Messrs. Thornycroft.

**SIVRIHISAR** (April 10 1940)

**YÜZBAŞ HAKKI** (ex-Torgud Reis, ex-Yüzbaşı Hakkı, 1940)

Displacement : 350 tons (375 tons full load)  
Dimensions : 172 × 26 × 5½ feet  
Guns : 1—3 inch, 1 pompom  
Mines : 80 to 100  
Machinery : 2 sets Atlas Polar Diesels, 2 shafts. B.H.P. : 1 200 = 15 kts.

Notes.—Built by John I. Thornycroft & Co. Ltd. Southampton. Launch dates above.



1948 Official.

**ATAK**

Builders : Gölcük  
Launched : 1938

Displacement : 500 tons  
Dimensions : 144½ × 24½ × 11½ feet  
Machinery : Atlas Polar Diesel. H.P. : 1,025 = 13 kts.  
Mines : 40

## Training Ship, Minelayers—TURKEY

## Minelayers—continued.



1938, courtesy Dott. Ing. L. Accorsi.

**NUSRET** (ex-Yardim, ex-Nusret)

Builders : Germania, Kiel  
Launched : 1912

Displacement : 365 tons  
Dimensions : 132 × 22 × 8½ feet  
Guns : 2—57 mm.  
Mines : 25  
Machinery : Triple expansion. I.H.P. : 1,200 = 15 kts.

Historical Note.—This vessel laid the minefield in the Dardanelles on which the British battleships *Irresistible* and *Ocean*, and the French battleship *Bouvet*, were lost on March 18, 1915.



1938, courtesy Dott. Ing. L. Accorsi.

**UYANIK** (ex-Intibah, ex-Warren Hastings)

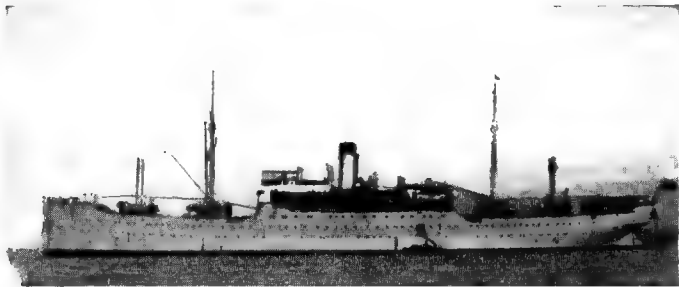
Built : Port Glasgow  
Launched : 1886

Displacement : 616 tons  
Dimensions : 202 × 30 × 12 feet  
Mines : 50  
Machinery : 2 shafts. H.P. : 1,670 = 12 kts.  
Boilers : Cylindrical

Notes.—Built of iron. Completely refitted in 1933. Originally a salvage tug

TURKEY—Submarine Depot Ship, Motor Torpedo Boats, Motor Minesweepers, etc.

Submarine Depot Ship.



1938, courtesy Dott. Ing L. Accorsi.

**ERKIN** (ex-German liner Trier)

Builders : Weser, Bremen  
Launched : 1923  
Displacement : 16,800 tons (9,415 tons gross)  
Dimensions : 458½ × 5½ × 28 feet  
Machinery : Triple expansion, 2 shafts. I.H.P. : 4,200 = 12.5 kts.

Note.—Purchased in July, 1936.

Motor Torpedo Boats.

Controlled Target Boats

**No. 1** (ex-CT 40, ex-PT 203)      **No. 3** (ex-CT 42, ex-PT 212)  
**No. 2** (ex-CT 41, ex-PT 205)      **No. 4** (ex-CT 43, ex-PT 215)

Notes.—Former United States motor torpedo boats acquired from Great Britain.

Boom Defence Vessels.

**AG 4** (ex-Larch ex-AN 21)

Launched : 2 July 1941  
Displacement : 500 tons  
Dimensions : 146 (w.l.), 163 (o.a.) × 30½ × 12½ feet  
Guns : 1—3 inch AA.  
Machinery : Diesel-Electric. B.H.P. : 800 = 12 kts.  
Complement : 48

Note.—Acquired from United States Navy in 1947.

Boom Defence Vessels—continued.



AG 1.

1948, Official.

**AG 1** (ex-Barbarian, Oct. 21, 1937)      **AG 3** (ex-Barfair, May 21, 1938)  
**AG 2** (ex-Barbette Dec. 15, 1937)

Displacement : 730 tons  
Dimensions : 150 (pp.), 173½ (o.a.) × 32½ × 9½ feet  
Guns : 1—3 inch AA.  
Machinery : Triple expansion. I.H.P. : 850 = 11.5 kts.  
Boilers : 2 S.E.  
Complement : 32

Note.—First two built by Blyth S.B. Co., third by J. Lewis & Sons. Launch dates above.

Repair Ships.



ONARAN

1953, Mr. A. Cemalettin Saracoglu.

**BAŞARAN** (ex-U.S.S. Patroclus, ARL 19, ex-LST955).  
**ONARAN** (ex-U.S.S. Alecto, AGP 14, ex-LST 558)

Displacement : 1,625 tons (3,960 tons full load)  
Dimensions : 316 (w.l.), 328 (o.a.) × 50 × 11 feet  
Machinery : Diesel. 2 shafts. B.H.P. : 1,700 = 11 kts.

Notes.—Acquired from United States Navy in 1952 and 1947 respectively. Başaran launched 22 Oct., 1944, by Bethlehem Hingham Shipyard. Onaran launched 14 April, 1944, by Missouri Valley Bridge & Iron Co.

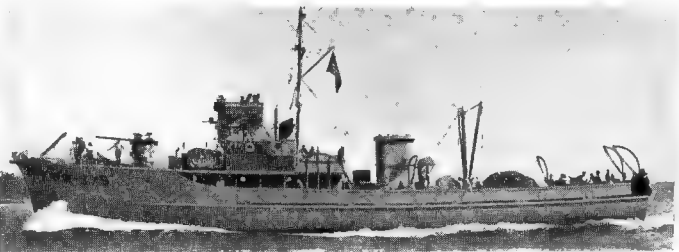
Motor Minesweepers.

“ K ” Class.



KAŞ (only one like this).

1948, U.S. Navy, Official.



KARAMÜRSEL.

U.S. Navy, Official.

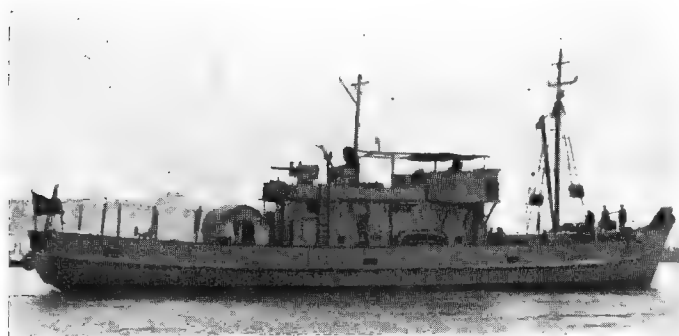
**KAŞ** (ex-YMS 79)  
**KEMER** (ex-YMS 228)  
**KEREMPE** (ex-YMS 239)  
**KILIMLI** (ex-YMS 289)

**KIRTE** (ex-YMS 307)  
**KOZLU** (ex-YMS 375)  
**KARAMÜRSEL** (ex-Küllük, ex-YMS 348)  
**KUŞADASI** (ex-YMS 468)

Displacement : 300 tons (325 tons full load)  
Dimensions : 136 × 24 × 6 feet  
Guns : 1—3 inch, 2—20 mm. AA.  
Machinery : 2 G.M. Diesels. B.H.P. : 1,000 = 15 kts (max.)  
Oil fuel : 11 kts. (normal)  
Complement : 16 tons  
20

Notes.—Acquired from U.S. Navy in 1947.

## Motor Minesweepers—continued.

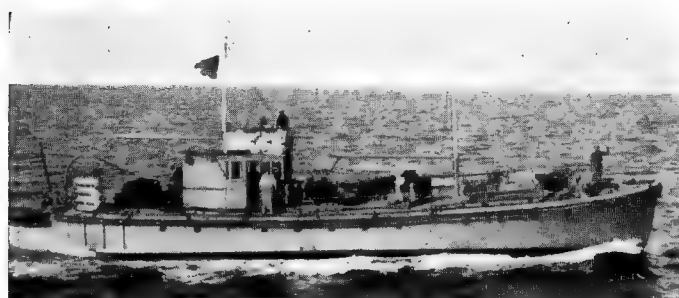


1948, Official.

**BARTIN** (ex-MMS 88)

Displacement: 255 tons (295 tons full load)  
 Dimensions: 105 (pp.), 119 (o.a.) × 23 × 9½ feet  
 Guns: 6 M.G.  
 Machinery: Diesel. B.H.P.: 500 = 10 kts.  
 Complement: 20

Note.—Acquired from Royal Navy in 1946.



1950, Turkish Navy, Official.

**ÇANAK** (ex-MMS 1)

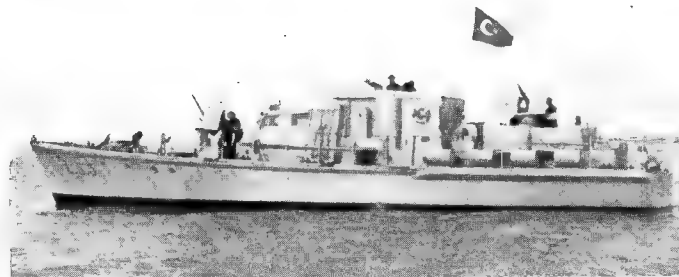
Builders: Thornycroft  
 Launched: 1937

Displacement: 32 tons  
 Dimensions: 75 × 14 × 5 (max.) feet  
 Machinery: 3 Thornycroft Y. 12-cylinder petrol engines. 3 shafts.  
 H.P.: 1,500 = 15 kts. (reduced to 10 kts. when sweeping)  
 Radius: 18 hours at full speed  
 Complement: 11

Notes.—Acquired 1939. Wood. Propellers are driven through S.L.M. oil-operated 2:1 reverse-reduction gears of the Modern Wheel Drive type.

## Motor Launches.

LS 9	LS 10	LS 11	LS 12
Displacement:	63 tons		
Dimensions:	83 × 14 × 5 feet		
Guns:	1—20 mm. AA.		
Machinery:	2 Cummins. B.H.P.: 1,100.		



1948, Official.

LS 1	LS 3	LS 5	LS 7
LS 2	LS 4	LS 6	LS 8
Displacement:	46 tons		
Dimensions:	72 (o.a.) × 15½ × 4½ (mean) feet		
Guns:	1—2 pdr. 1—20 mm. AA.		
Machinery:	Gardner Diesel. B.H.P.: 260 = 12 kts.		
Complement:	7		

Note.—Harbour defence craft. (ex-HDML). Acquired from Great Britain in 1944-45.



1948, Official.

<b>AB 1</b> (ex-ML 386)	<b>AB 4</b> (ex-ML 837)	<b>AB 7</b> (ex-ML 862)
<b>AB 2</b> (ex-ML 584)	<b>AB 5</b> (ex-ML 838)	<b>AB 8</b> (ex-ML 863)
<b>AB 3</b> (ex-ML 836)	<b>AB 6</b> (ex-ML 842)	

Displacement: 65 tons  
 Dimensions: 112 × 17½ × 4 feet  
 Guns: 1—3 pdr., 2—20 mm. AA., 4 M.G.  
 Machinery: 2 Hall-Scott engines. B.H.P.: 1,120 = 21 kts.  
 Oil fuel:  
 Complement: 18

## Motor Launches—continued.



MTB 9.

1949, Official.

MTB 2	MTB 4	MTB 6	MTB 8
MTB 3	MTB 5	MTB 7	MTB 9
Displacement:	70 tons		
Dimensions:	71½ × 13½ × 8½ (max.) feet		
Machinery:	Diesel. B.H.P.: 2,000 = 10 kts.		
Complement:	8		

Note.—All launched 1942.

## Submarine Rescue Ship.



Added 1949, U.S. Navy, Official.

**KURTARAN** (ex-Bluebird, ex-Yurok)

Builders: Charleston S.B. & D.D. Co.  
 Launched: 1946

Displacement: 1,294 tons  
 Dimensions: 205 (o.a.) × 38½ × 12 feet  
 Guns: 1—3 inch, 2—40 mm. AA.  
 Machinery: Diesel-electric. B.H.P.: 3,000 = 16 kts.

Notes.—Former salvage tug, adapted as submarine rescue vessel 1947. Transferred from United States Navy, Aug. 15, 1950 under Mutual Defense Assistance Program.

TURKEY—Tenders, Oilers, Collier

Deep Sea Diving Tender.

AKIN (ex-Rasit, ex-Cow-Whale)

Builders :	Smith's Dock Co.
Launched :	1915
Displacement :	336 tons
Dimensions :	139½ × 25 × 6½ feet
Machinery :	Triple expansion. I.H.P. : 1,000 = 12 kts.
Coal :	60 tons
Complement :	26

Notes.—Ex-Admiralty whaler, purchased 1926. Fitted with deep-sea diving apparatus with which a depth of 115 fathoms has been reached.

Tender.



1948, Official.

ISIN (ex-Imia Layteri)

Builders :	James Pollock, Sons & Co., Faversham
Launched :	1941
Displacement :	390 tons full load
Dimensions :	110 × 24 × 7 feet
Guns :	1 M.G.
Machinery :	Crossley Diesel B.H.P. : 330
Oil fuel :	32 tons

Submarine Tender.

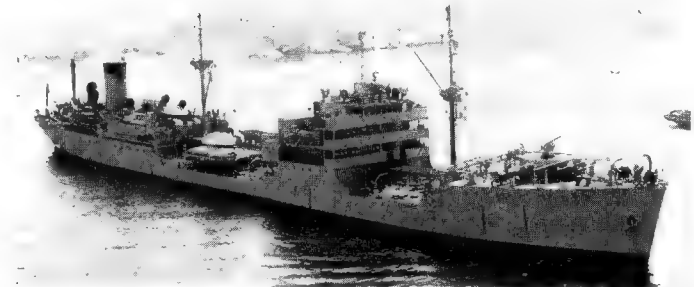
DALGIÇ (1939)

Note.—Small motor vessel, attached to Submarine Depot Ship Erkin as a tender.

Oilers.

TAŞKIZAK

Builders :	Haskoy Naval D.Y. Istanbul
Launched :	22 Aug., 1950.
Displacement :	2,500 tons (3,500 tons full load)
Dimensions :	260 × 41 × 19½ feet
Machinery :	Atlas Polar-Diesels. 2 shafts B.H.P. : 1,920 = 14 kts.



AKAR.

1951, A. & J. Pavia.

AKAR (ex-Istanbul, ex-Adour)

Displacement :	4,289 tons
Dimensions :	433 × 52½ × 27 feet
Machinery :	Parsons geared turbines. S.H.P. : 5,200 = 15 kts.



AKPINAR.

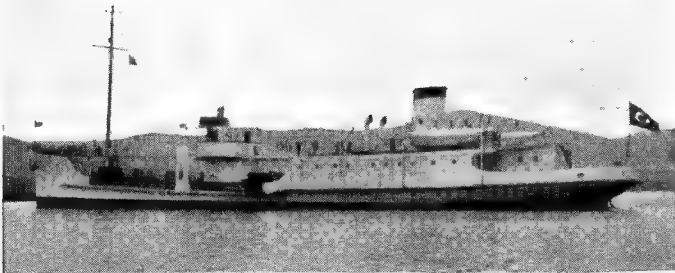
1950, Turkish Navy, Official.

AKPINAR (ex-Chiwaukum)

Builders :	East Coast S.Y. Inc., Bayonne
Laid down :	2 April, 1944
Launched :	5 May, 1944
Completed :	22 July, 1944
Displacement :	700 tons, 2,700 tons full load (1,453 tons deadweight)
Dimensions :	212½ (w.l.) 220½ (o.a.) × 37 × 12½ feet
Machinery :	Diesel. B.H.P. : 800 = 10 kts.

Note.—Formerly AOG 26.

Oilers—continued.



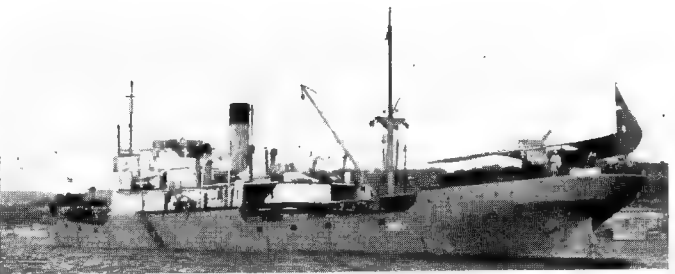
GÖLCÜK.

1938, courtesy Dott. Ing. L. Accorsi.

GÖLCÜK

Builders :	Gölcük Dockyard, Ismit
Launched :	4 Nov., 1935
Displacement :	1,255, tons
Deadweight capacity :	750 tons
Dimensions :	185 × 31½ × 10 feet
Machinery :	B. & W. Diesel. B.H.P. : 700 = 12.5 kts.

Collier.



ÜLKÜ.

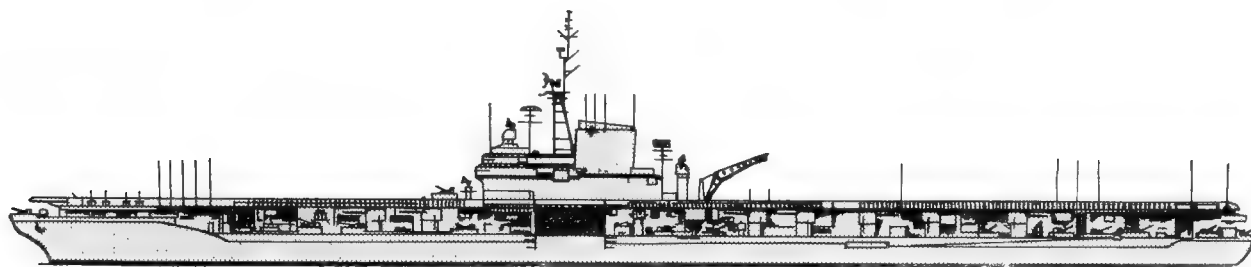
1952, Mr. A. Cemaleddin Saracoglu.

ÜLKÜ (ex-Shandon)

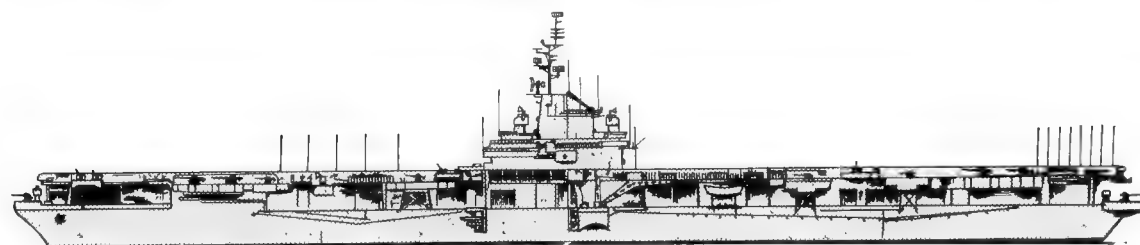
Launched :	1919
Displacement :	7,233 tons (3,069 tons gross)
Deadweight capacity :	5,150 tons
Dimensions :	331 × 46½ × 21½ (mean) feet
Machinery :	Triple expansion. I.H.P. : 1,750 = 10 kts.
Boilers :	3 cylindrical
Fuel :	750 tons

Notes.—Built at West Hartlepool. Purchased in 1934.

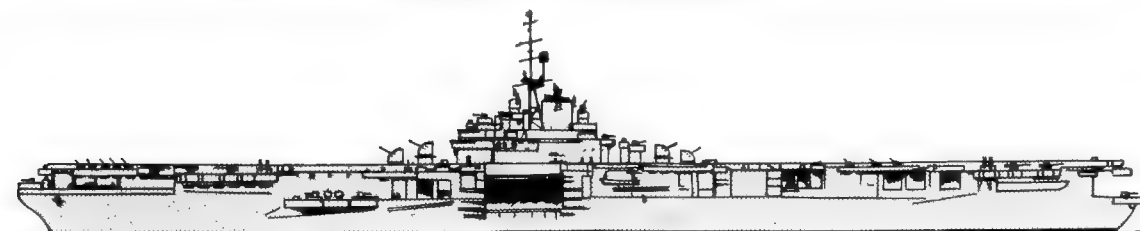




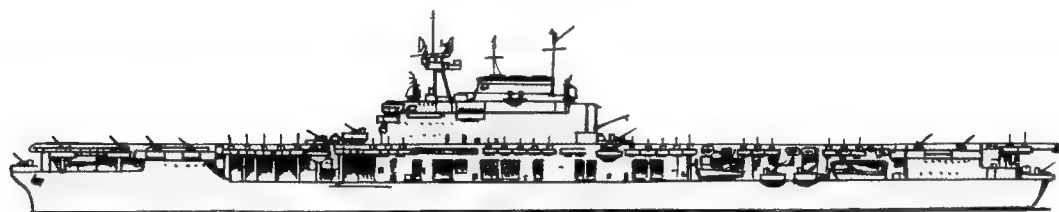
CORAL SEA, FRANKLIN D. ROOSEVELT, MIDWAY.



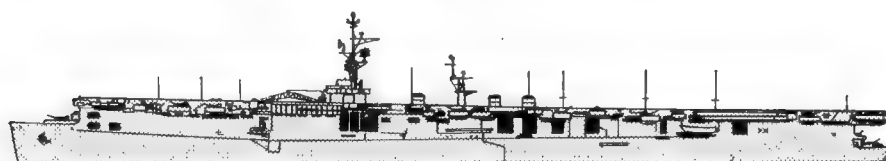
ORISKANY. Improved ESSEX Class.



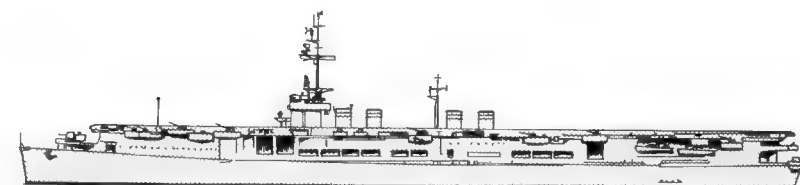
Original ESSEX Class.



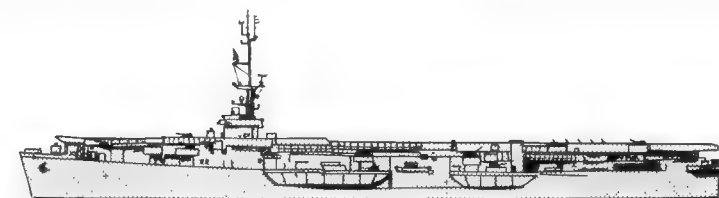
ENTERPRISE.



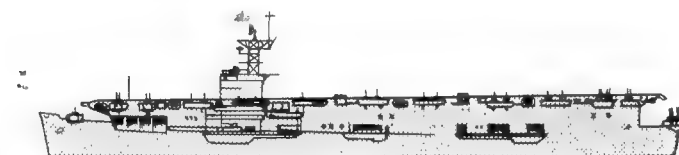
SAIPAN, WRIGHT.



COWPENS Class.



COMMENCEMENT BAY Class.



ANZIO Class.



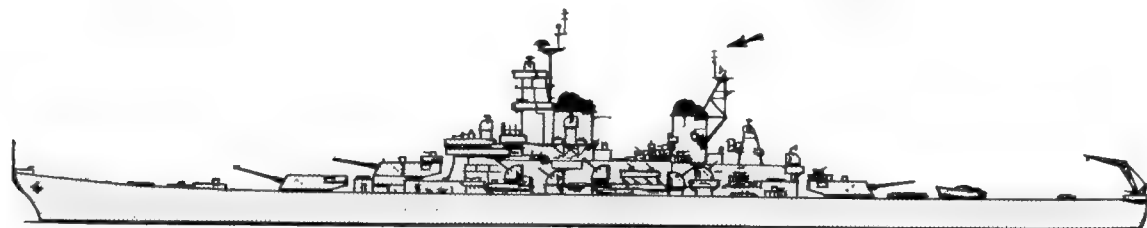
BOGUE Class.



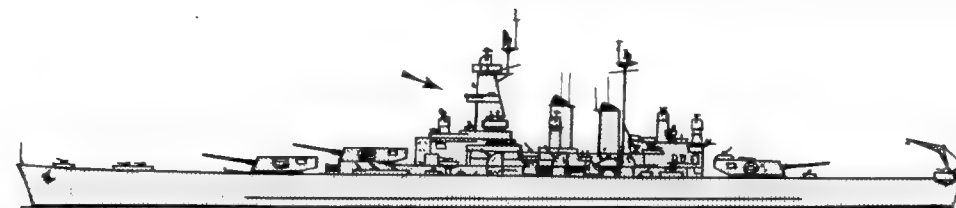
ALTAMAHA



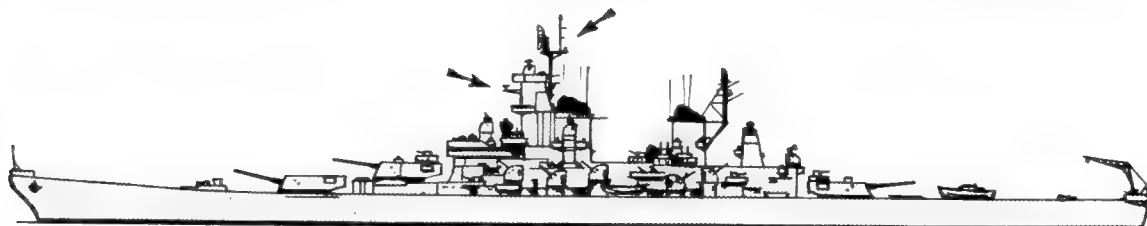
SUWANEE Class.



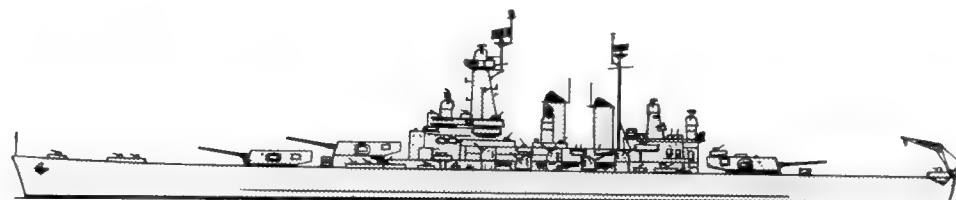
MISSOURI.



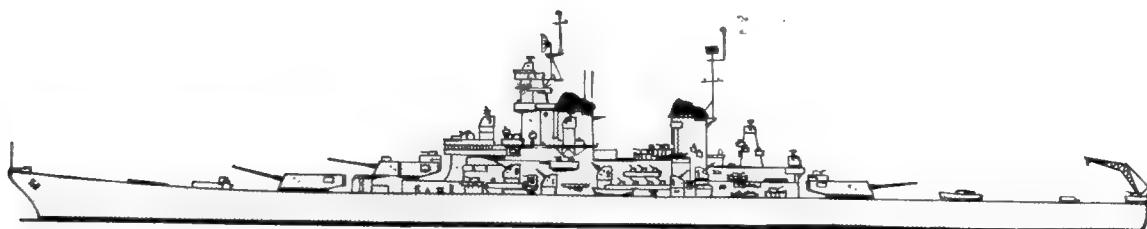
NORTH CAROLINA.



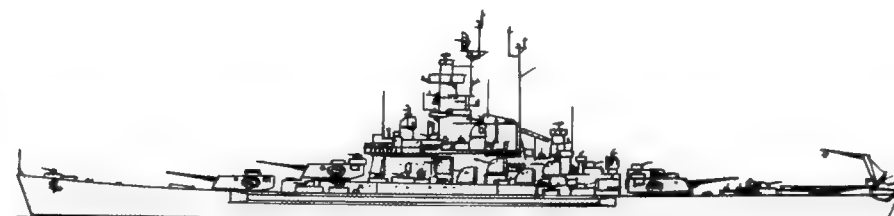
NEW JERSEY.



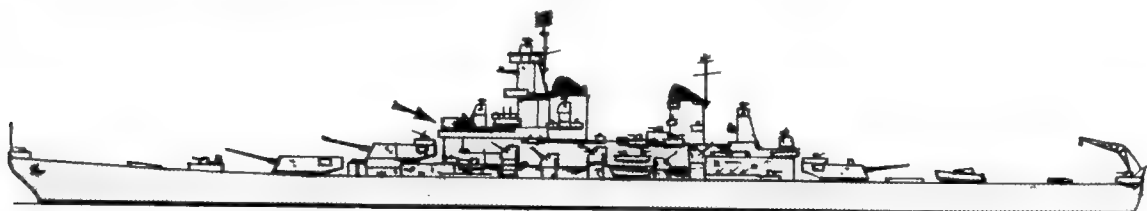
WASHINGTON.



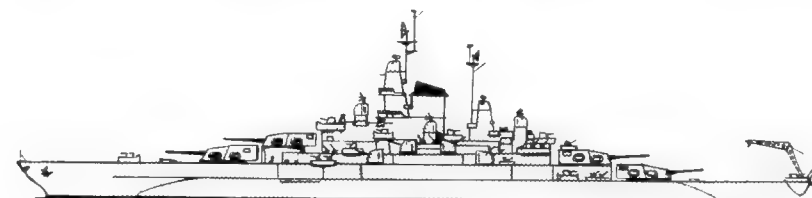
WISCONSIN.



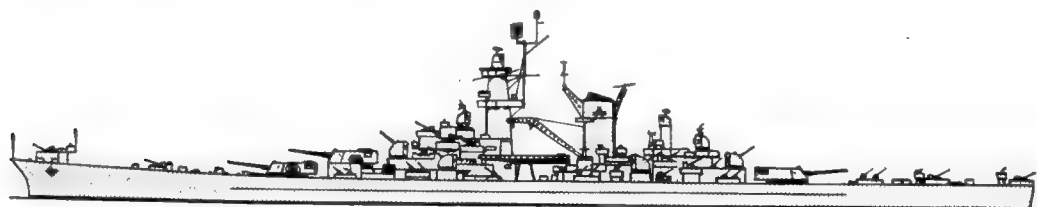
ALABAMA, INDIANA, MASSACHUSETTS, SOUTH DAKOTA.



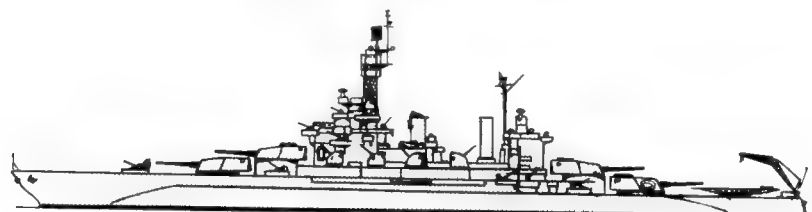
IOWA. (Now has tripod mainmast stepped against after funnel)



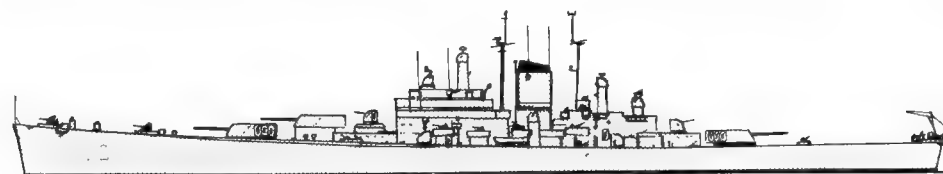
CALIFORNIA, TENNESSEE, WEST VIRGINIA.



ALASKA, GUAM. Large (Battle) Cruisers.



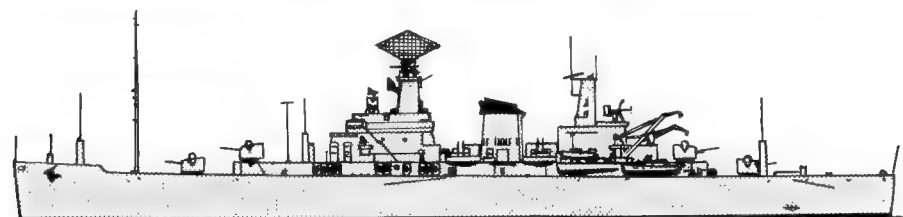
COLORADO, MARYLAND.



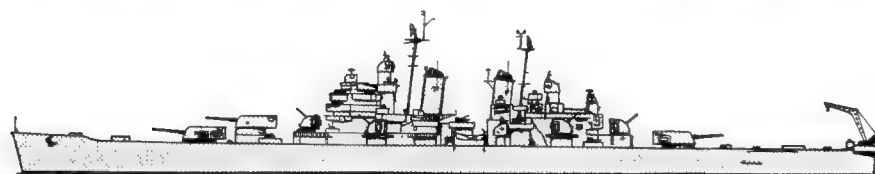
DES MOINES, NEWPORT NEWS, SALEM.



ALBANY, OREGON CITY, ROCHESTER.



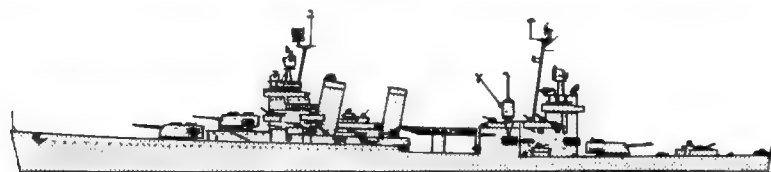
NORTHAMPTON. Tactical Command Ship. Originally designed as heavy cruiser.



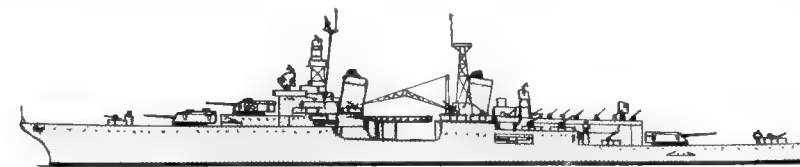
BALTIMORE Class.



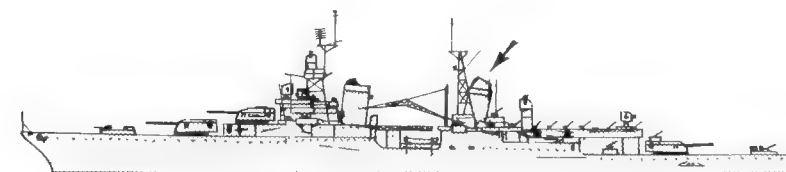
WICHITA.



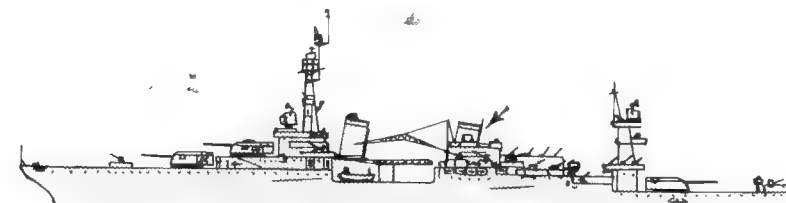
NEW ORLEANS Class.



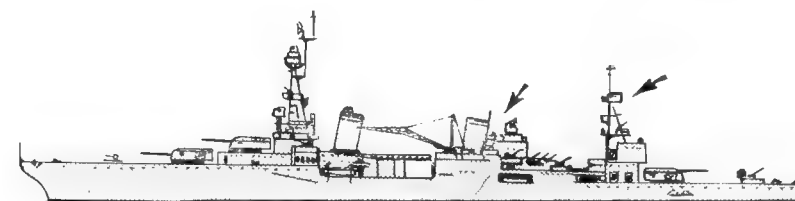
PORTLAND (Forecastle breaks before forefunnel.)



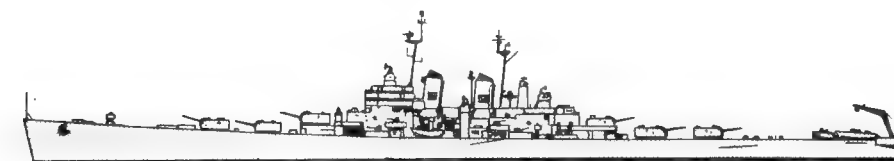
AUGUSTA (Forecastle breaks abaft forefunnel.)



CHESTER (Note after funnel and mainmast.)

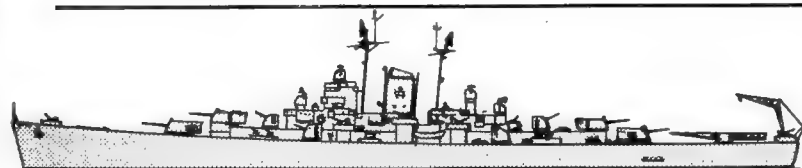


LOUISVILLE.

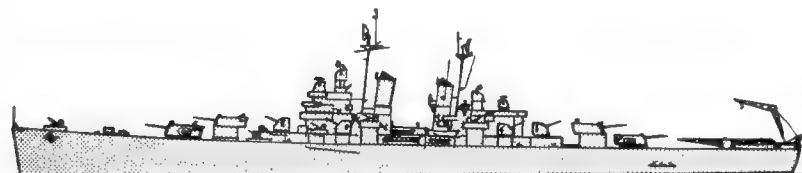


WORCESTER.

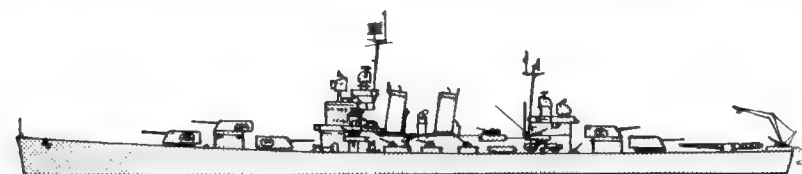
ROANOKE without erection forward and no stumps before second funnel.  
(Larger than most heavy cruisers, but rated as light cruisers).



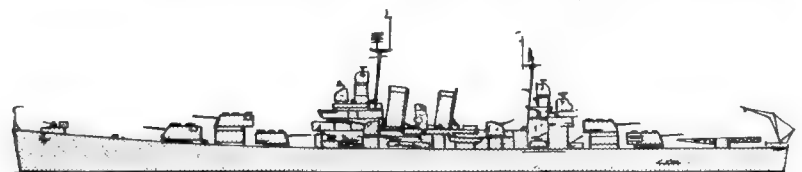
FARGO, HUNTINGTON.



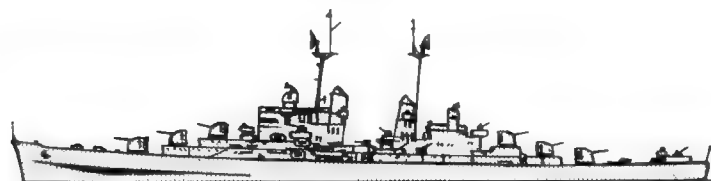
CLEVELAND Class.



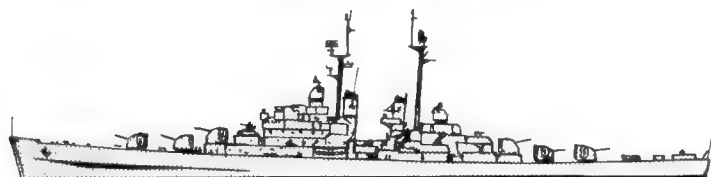
HONOLULU.



SAVANNAH.



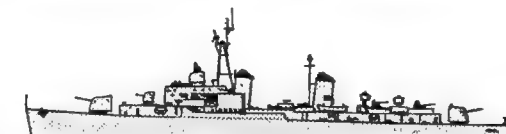
OAKLAND, SAN DIEGO Types.



FRESNO, JUNEAU, SPOKANE.



ROBERT A. OWENS.



BASILONE.



PERRY.  
(GEARING Class with tripod mast.)



NEWMAN K. PERRY.  
(Radar Picket GEARING Class with tripod.)



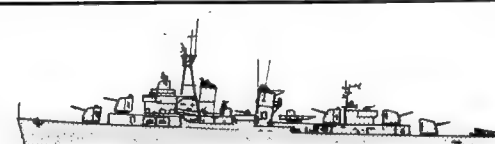
GOODRICH.  
(Radar Picket GEARING Class with polemast.)



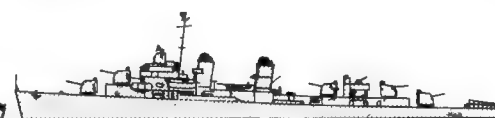
PURDY.  
(ALLEN M. SUMNER Class with tripod.)



FLETCHER Class with 4—5" guns.



FLETCHER Class with 5—5" guns.



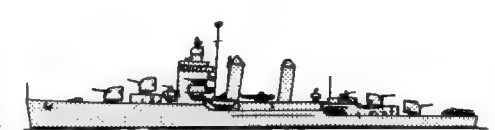
FLETCHER Classes.  
(Later type. Earlier vessels have higher fire control.)



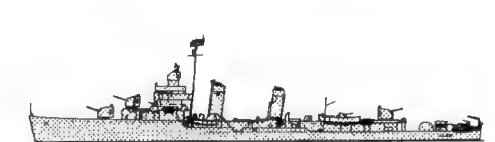
CONY.  
(Converted FLETCHER Class with polemast.)



JENKINS.  
(Converted FLETCHER Class with tripod mast.)



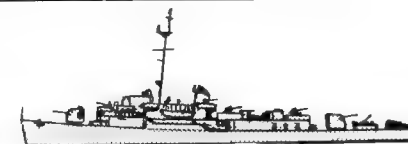
GLEAVES and MAYO Classes.



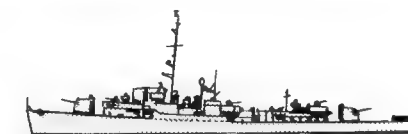
HAMBLETON Class.  
Fast Minesweepers. (Modified Destroyers.)



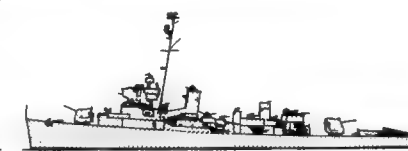
WINSLOW.  
Experimental Radar Picket Destroyer.



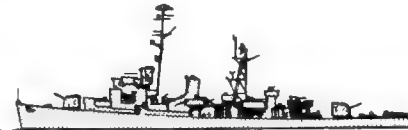
RUDDEROW Class.



JOHN C. BUTLER Class.



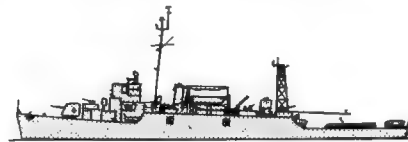
BUCKLEY Type with 5" guns.



WILLIAM T. POWELL.  
(BUCKLEY Type as Radar Picket.)



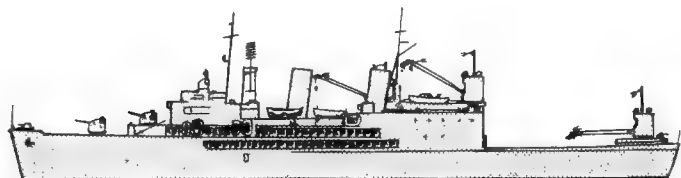
JOYCE.  
(EDSALL Type as Radar Picket.)



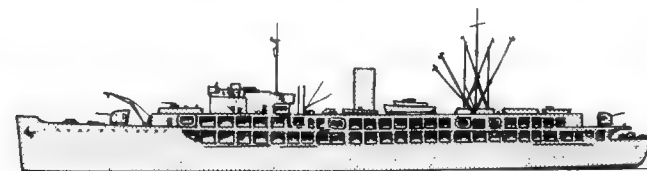
LLOYD (Lattice Main.)  
Fast Transport (Modified Destroyer Escort.)



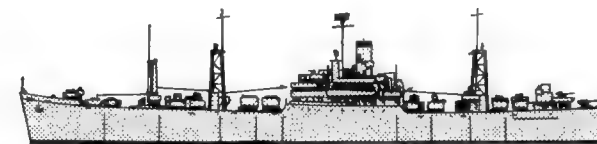
CARPELLOTTI Type.  
Fast Transports. (Modified Destroyer Escorts.)



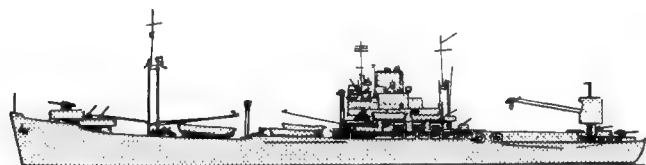
ALBEMARLE.  
Seaplane Tender.



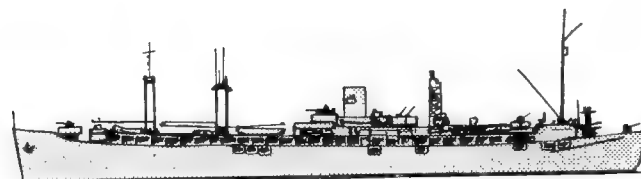
CASCADE.  
Destroyer Tender.



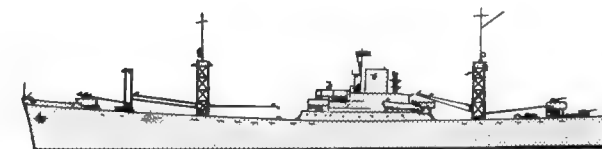
OGLETHORPE.  
Attack Cargo Ship.



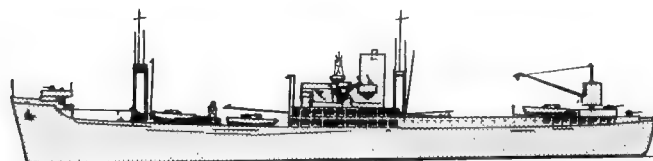
POKOMOKE.  
Seaplane Tender.



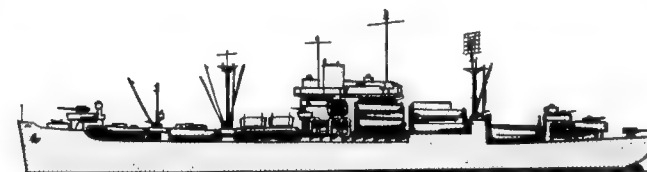
DELTA ("Goalposts" in place of crane in BRIAREUS.)  
Repair Ships.



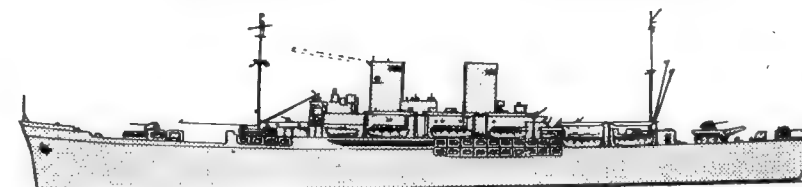
ELECTRA.  
Attack Cargo Ship.



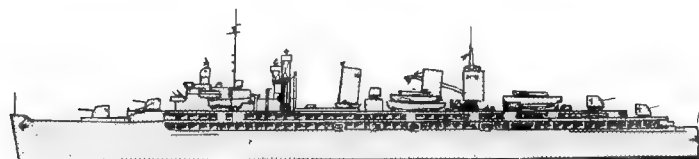
TANGIER.  
Seaplane Tender.



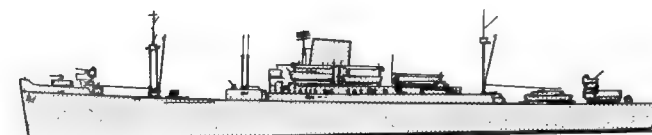
CAMBRIA.  
Attack Transport.



GENERAL Class.  
Transports.



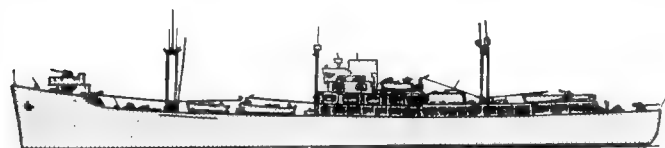
SPERRY (PRAIRIE similar except for Bofors in "B" position.)  
Submarine Tenders.



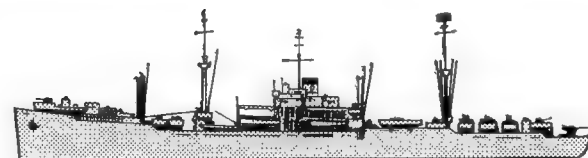
PRESIDENT Type.  
Attack Transports.



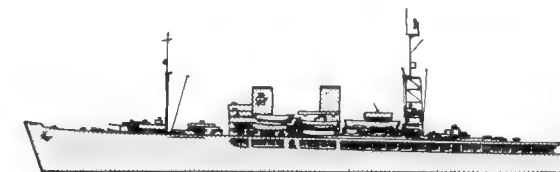
GENERAL M. B. STEWART.  
MSTs Transport.



GRIFFIN.  
Submarine Tender.



LATIMER.  
Attack Transport.



TANNER.  
Surveying Ship, Attack Cargo Type.



U.S.A.—Attack Aircraft Carriers (CVA)

New Construction.

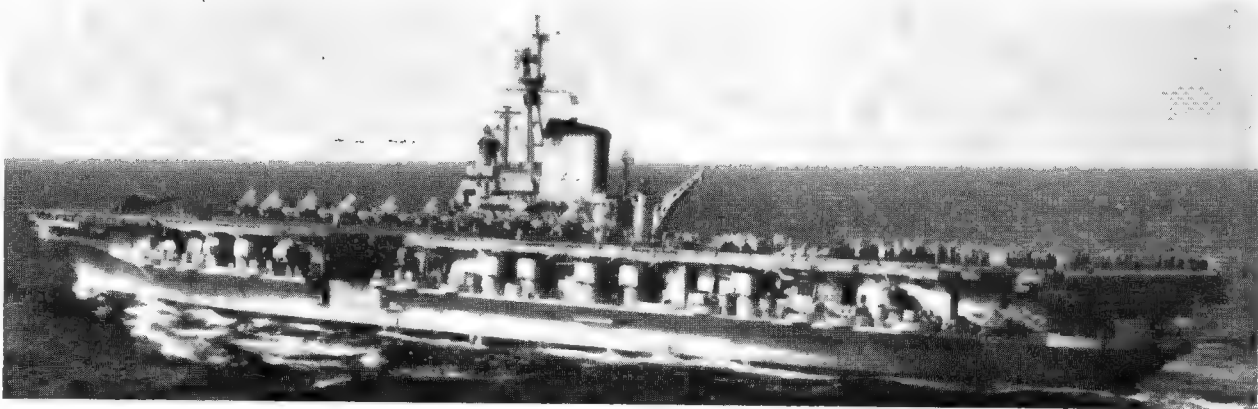
3 + 1 “Forrestal” Class

FORRESTAL	RANGER	SARATOGA
Displacement :	Forrestal 59,900 tons standard, Saratoga 60,000 tons (75,900 tons full load, Saratoga 76,000 tons)	
Dimensions :	Length : 1,040 (o.a.) feet. Beam : 248 (extreme width), 129½ (waterline beam) feet. Draught : 37 (max.) feet.	
Aircraft :	100	
Machinery :	4 General Electric turbines and gears. 4 shafts. S.H.P. : 260,000 = 33 kts. (Saratoga 35 kts.)	
Boilers :	8 Babcock & Wilcox (Forrestal), 8 by N.Y. Naval Shipyard (Saratoga)	
Complement :	3,500	

General Notes.—World's largest aircraft carriers ever to be built. Originally to have been flush-decked with retractable bridge, but as redesigned now to have angled deck and the usual fixed island superstructure on the starboard side, which the angled deck allows. Four catapults and four lifts, and three separate launching areas for aircraft. Forrestal (contract awarded 12 July, 1951 : Engineers, Westinghouse Electric Corporation) was named after the Secretary of Defense who was in office when the subsequently cancelled Heavy Carrier United States (CVA 58) was named in 1949. To cost \$218,000,000 (Forrestal), \$209,700,000 (Saratoga), \$182,000,000 (Ranger), \$177,000,000 (CVA 62).

Construction Notes.—The design calls for a flight deck about 80 feet longer than that provided in the largest existing carriers of the “Midway” class to operate larger, heavier carrier-based naval aircraft of the newest designs from her decks. Will have increased catapult and arresting capacity, larger elevators, and higher hangar decks, and television system to aid in landing of aircraft. There will be added armour and improved underwater protection. The flight deck will be a strength deck by reducing the openings in the hangar sides, bow to be closed up to the flight deck for seaworthiness in all types of weather ; machinery arrangements to produce somewhat higher speeds. Forrestal will be launched in autumn 1954 and completed in June 1955. Saratoga to be completed in 1956. Ranger authorised 1954 fiscal year ; contract awarded 2 Feb. 1954 ; to complete in 40 months after keel laying, contract for turbines awarded to General Electric Company. A fourth “Forrestal” class carrier, CVA 62, is requested in the 1955 fiscal appropriations.

No.	Name	Builders	Laid down
CVA 59	Forrestal	Newport News Shipbuilding & Drydock Co.	14 July 1952
CVA 60	Saratoga	New York Naval Shipyard, Brooklyn	16 Dec. 1952
CVA 61	Ranger	Newport News Shipbuilding & Drydock Co.	End 1954
CVA 62		New York Naval Shipyard, Brooklyn	



MIDWAY. (see next page)

Added 1954, U.S. Navy, Official.



FRANKLIN D. ROOSEVELT (see next page).

Added 1952, U.S. Navy, Official.

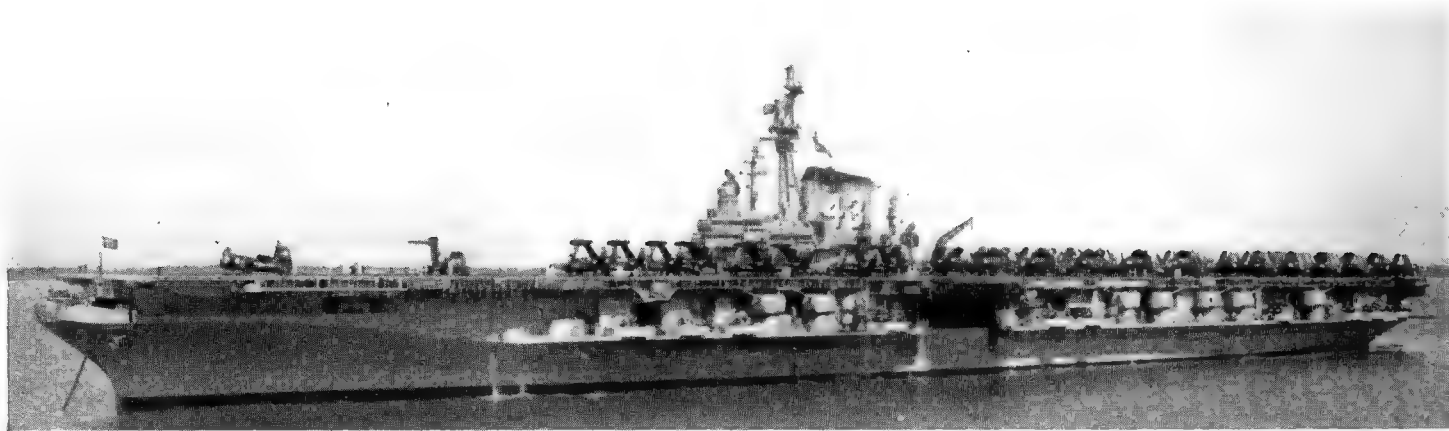
Attack Aircraft Carriers (CVA).

3 "Midway" Class.

CORAL SEA

FRANKLIN D. ROOSEVELT (ex-Coral Sea)

MIDWAY



CORAL SEA.

1953, U.S. Navy, Official.

Displacement : 45,000 tons designed, 51,000 tons standard (62,000 tons full load). Franklin D. Roosevelt as converted 62,674 tons full load

Dimensions : Length : 968 (o.a.) feet. Beam : 113 feet (hull) Width : 136 (max.) feet. Draught : 32½ feet. Franklin D. Roosevelt as converted : Length : 974 feet. Width (extreme) : 209 feet.

Gu Aircraft : 14—5 inch, 54 cal. ; 40—3 inch, 50 cal.

Machinery : 137 (including large bombers of latest type) 11 Geared turbines. 4 shafts. S.H.P. : 212,000 = 33 kts.

Boilers : 12 Babcock & Wilcox

Complement : 2,510 (peace), 3,300 (war)

General Notes.—Are the most extensively welded ships in U.S. Navy, and cost \$90,000,000 each. On Sept. 6, 1947, the first carrier-borne guided missile was launched from the flight deck of the Midway. On March 7, 1949, a Lockheed P2V (Neptune) long-range bomber which can handle atomic bombs took off with rocket assistance from the Coral Sea with a load of 37 tons on a 2,000-mile flight. Three more ships of this class (CVB 44, 56, 57) were projected, but cancelled in 1945.

Armour Notes.—Officially stated that these ships are protected by heavy armour, intricate water-tight compartments and an improved system of damage control. Armoured flight deck is 932 x 113 feet, covered with non-skid surface material ; it was strengthened in all 3 ships during 1947-48, to enable heavier aircraft to be handled.

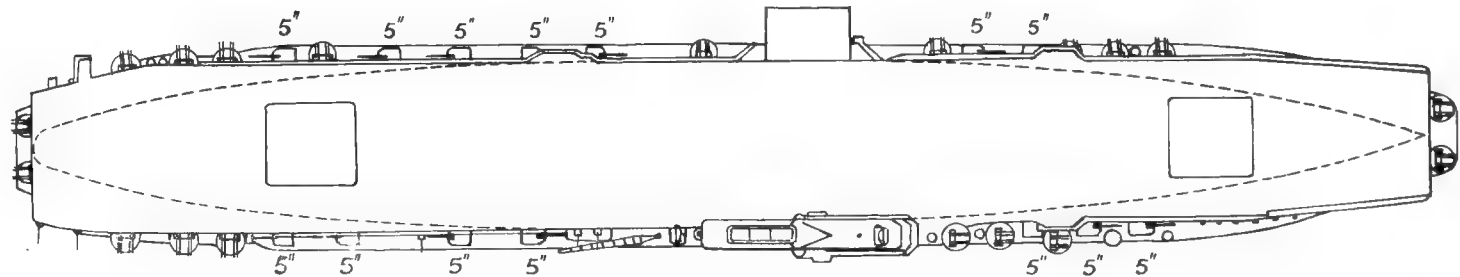
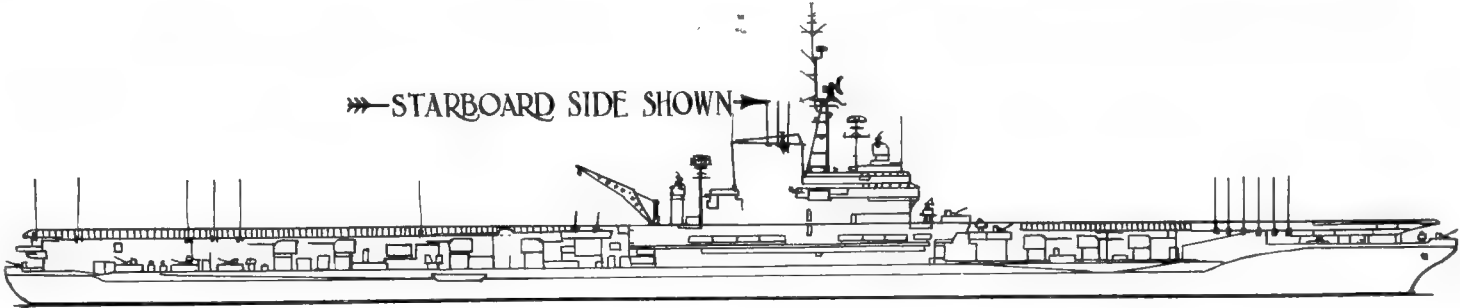
Gunnery Notes.—Midway and Franklin D. Roosevelt originally had eighteen 5 inch. They now mount fourteen 5 inch, 54 cal. d.p. They and Coral Sea now have twin 3-inch mountings in place of the former quadruple 40 mm. mountings.

Appearance Notes.—Coral Sea differs in her gun layout from other two.

Classification Notes.—All large aircraft carriers, i.e. CVB's and CV's, were re-classified as Attack Aircraft Carriers, CVA, in Oct. 1952.

Modernisation and Conversion Notes.—Franklin D. Roosevelt is being modernised at Puget Sound Naval Shipyard under 1954 conversion programme. To have angled deck, 3 higher capacity catapults (steam), increased aviation fuel capacity, and broader hull. Remodelling will enable her to handle faster and heavier jet aircraft. Work will take two years and cost \$39,000,000, 40 per cent. of ship's original cost. Modernisation and conversion of Midway, including installation of the canted deck, was requested in the 1955 fiscal appropriations.

STARBOARD SIDE SHOWN



Plan and elevation of "Midway" Class

No.	Name	Builders	Machinery	Laid down	Launched	Completed
CVA 43	Coral Sea	Newport News Co.	Westinghouse	10 July 1944	2 Apr. 1946	1 Oct. 1947
42	Franklin D. Roosevelt	New York Navy Yard	General Electric	1 Dec. 1943	29 Apr. 1945	27 Oct. 1945
41	Midway	Newport News Co.	Westinghouse	27 Oct. 1943	20 Mar. 1945	11 Sept. 1945

Flight Deck Notes.—The angled deck arrangement is to be installed in the "Midway" class aircraft carriers. Only half the arresting gear for normal operations is required, eliminates crash barriers, releasing considerable topside weight and gallery deck space.

U.S.A.—Attack Aircraft Carriers (CVA)

Attack Aircraft Carriers (CVA).

15 "Oriskany" (Improved "Essex") Class.

ORISKANY

No. : CVA 34  
Builders: New York Navy Yard  
Ordered: 7 Aug. 1942  
Laid down: 1 May 1944  
Launched: 13 Oct. 1945  
Completed: 25 Sept. 1950

BENNINGTON  
BON HOMME RICHARD  
ESSEX  
HANCOCK (ex-Ticonderoga)  
HORNET (ex-Kearsarge)  
INTREPID  
KEARSARGE

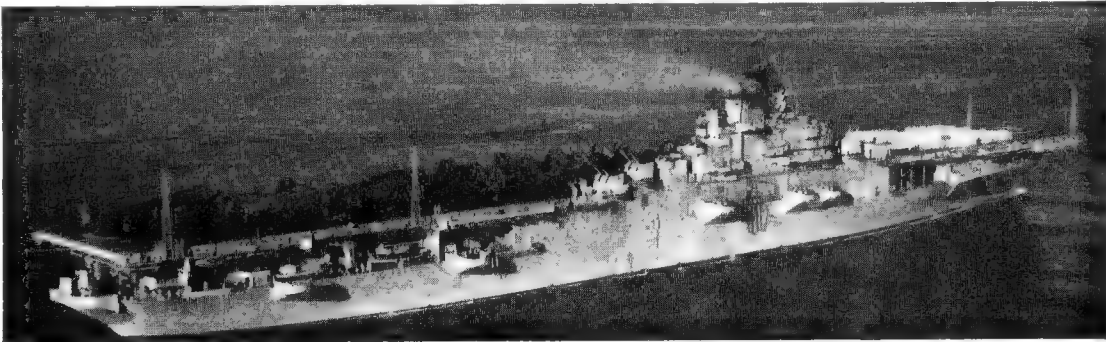
LAKE CHAMPLAIN  
LEXINGTON (ex-Cabot)  
RANDOLPH  
SHANGRI-LA  
TICONDEROGA (ex-Hancock)  
WASP (ex-Oriskany)  
YORKTOWN  
(ex-Bon Homme Richard)

Displacement : 33,100 tons standard (40,800 to 42,600 tons full load).  
(Displacement of 27c conversions : 41,434 tons full load)  
Dimensions : Length : 786 (pp.), 840 (w.l.), 888 (o.a.) feet. (Oriskany 904 feet (o.a.).  
Flight deck : 876 feet. Hangar : 720 feet. Beam : 129 feet (hull—over  
sponsons). Width : 152 feet (extreme). Draught : 37 (max.) feet.  
(Dimensions of 27c conversions : Length : 830 feet. Width : 164 feet  
(extreme)  
Guns : 8—5 inch, 38 cal. ; 28—3 inch, 50 cal. in twin mounts  
Aircraft : 100  
Armour : 3" sides, 3" decks.  
Machinery : Geared turbines. 4 shafts. S.H.P.: 150,000 = 33 kts.  
Boilers : 8 Babcock & Wilcox  
Complement : About 2,100 (peacetime), 2,800 to 3,300 (wartime)



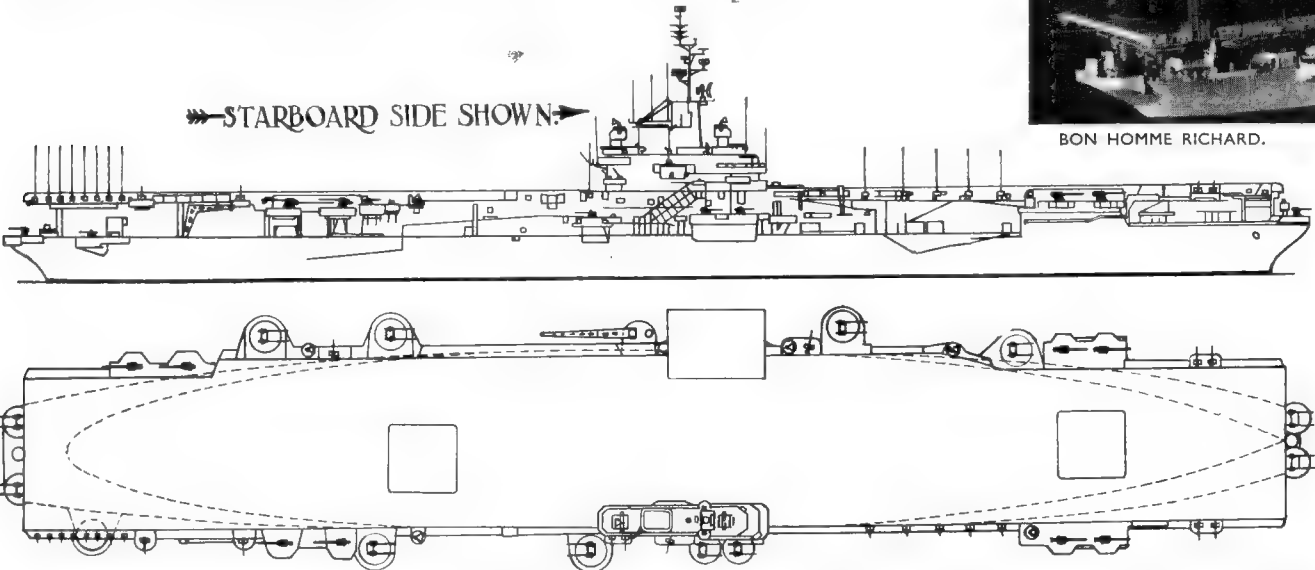
WASP.

1953, U.S. Navy, Official.

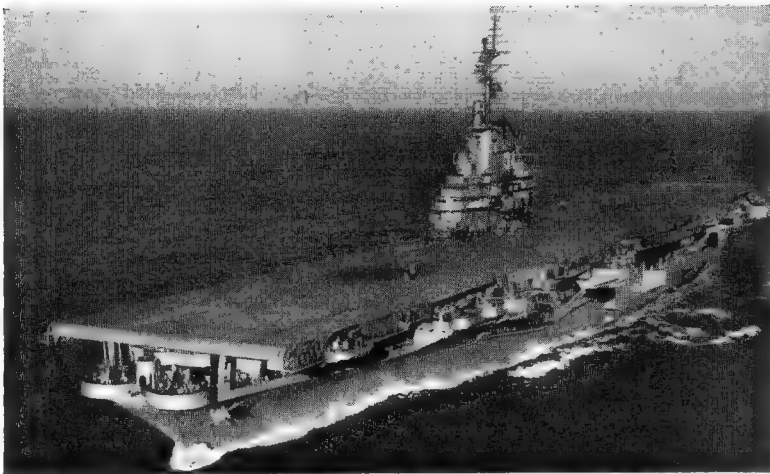


BON HOMME RICHARD.

1954, U.S. Navy, Official.



Notes.—Oriskany is the first of a new type to which modified "Essex" class carriers conform. Construction was delayed with a view to recasting of plans. Was completed to a modified design with a smaller island, heavier decks and handling gear to operate bigger aircraft. She has larger lifts, more powerful catapults, a stronger runway and increased storage for petrol as compared with "Essex" class. Bulges offset the extra weight thus added. For builders and construction dates of above modernised ships of the "Essex" class see next page.) Bon Homme Richard, Lexington and Shangri-La are to be fitted with the angled deck. Hancock completed conversion Jan. 1954 ; first to have new steam catapults and starboard deck-edge elevator ; first of 27c conversions, has one-foot wider blister than 27a conversions. Recent conversions completed as follows :—Intrepid Apr. 1954 (recommissioned 18 June 1954 after \$40,000,000 conversion including installation of steam catapults), Ticonderoga Apr. 1954, Lexington Oct. 1954, Shangri-La Oct. 1954, Bon Homme Richard May 1955. Installation of canted decks in Bennington ; Wasp and Yorktown requested in 1955 fiscal appropriations.

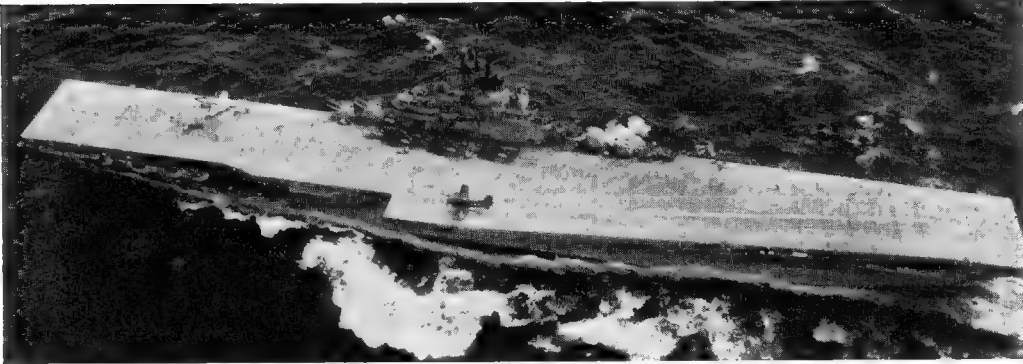


ORISKANY.

1951, U.S. Navy, Official

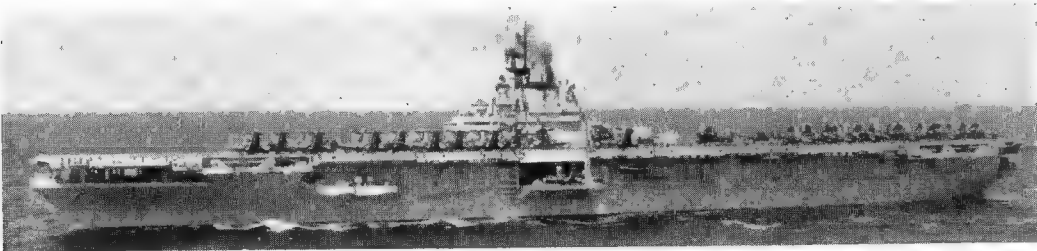
ASW Support Aircraft Carriers (CVS.)

9 Original "Essex" Class.



ANTIETAM.

1954, U.S. Navy, Official.



PHILIPPINE SEA (note deck-edge elevator)

1954, U.S. Navy, Official

ANTIETAM  
BOXER  
BUNKER HILL

FRANKLIN  
LEYTE (ex-Crown Point)  
PHILIPPINE SEA (ex-Wright)

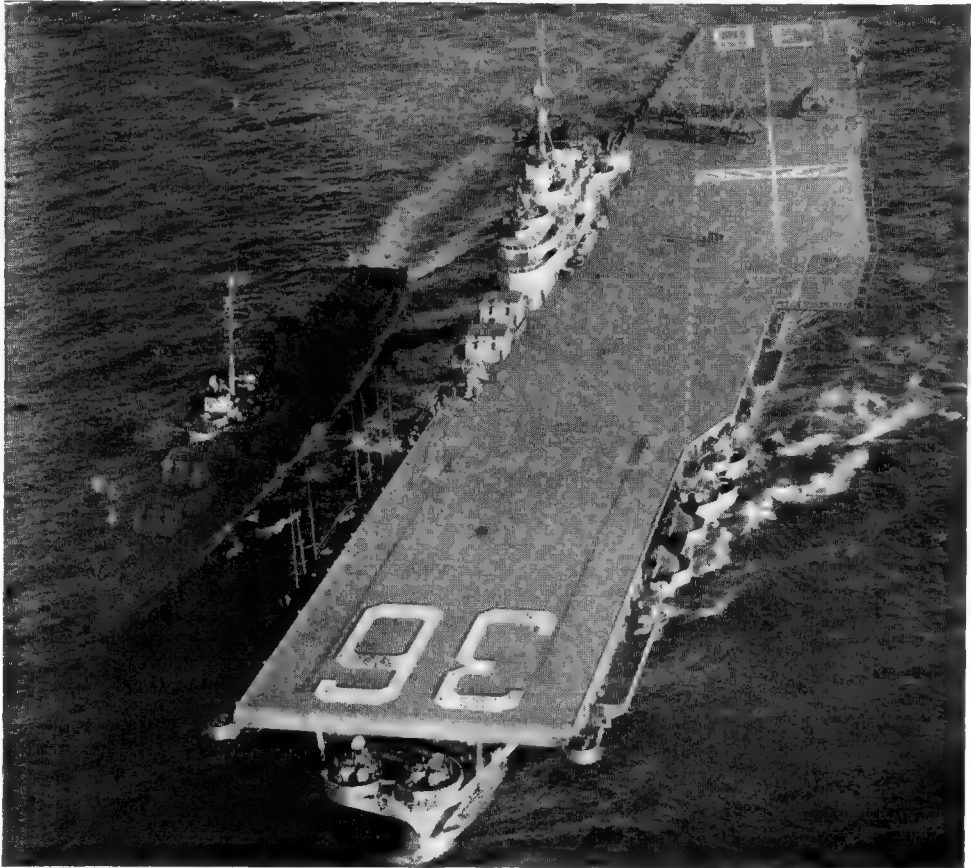
PRINCETON  
TARAWA  
VALLEY FORGE

Displacement : 27,100 tons designed, 30,800 standard (38,500 tons full load)  
Dimensions : Length : 786 (pp.), 840 (w.l.), 888 (o.a.) feet. (Early ships are 876 (o.a.) feet.) Flight deck : 876 feet  
Hangar : 720 feet. Beam : 93 feet (hull).  
Guns : Width: 147 feet (extreme). *Antietam* 181 feet (including angled deck). Draught: 30 (max.) feet  
12—5 inch, 38 cal., 44 to 72—40 mm. AA., 52—20 mm. (quadruple mounts). Some active ships have  
3-inch guns in place of 40 mm. mounts., 36 to 52—20 mm. (twin mounts)  
Aircraft : 95 to 100 (107 have been carried by close stowage), 50 in CVS 32, 36, 45, 47 (see notes)  
Armour : 3"—2" side amidships, 3" hangar deck, 1½" flight deck, 1½" upper deck  
Machinery : Westinghouse geared turbines. 4 shafts. S.H.P. : 150,000 = 33 kts.  
Boilers : 8 Babcock & Wilcox  
Complement : 2,100 (ship's company plus air group personnel) peacetime; 2,800 (plus or minus) wartime

**General Notes.**—First of class ordered 1940. *Essex* was built in 20 months, *Yorktown* in 17½ months. Later ships of this class of improved design, with stronger flight decks, and were more thoroughly sub-divided. *Princeton* launched the new guided missile "Regulus" at sea. The weapon can be installed on a variety of naval ships at low cost and used multi-operationally. 14 units of this class have been or are being modernised on similar lines to *Oriskany*, completed in modernised state (see preceding page). CVSs are undergoing conversion for anti-submarine warfare. Conversion of *Leyte* has been completed ; aircraft complement reduced to 50 and operating crew to 1,300 (half previous recent complement). *Boxer*, *Philippine Sea* and *Tarawa* to be modernised.

**Engineering Notes.**—In Nov., 1945, *Lake Champlain* made Atlantic crossing from Gibraltar to Newport News in 4 days, 8 hours 51 minutes, an average speed of 32.048 kts. *Philippine Sea* made Pacific crossing from Yokohama to San Francisco in 7 days, 13 hours, an average speed of 25.2 kts.

**Appearance Notes.**—Later ships of this class have bow and stern of modified form. Flight deck of *Antietam* angles 8 degrees, 9 minutes to port with arresting gear oriented to the centre line of her angled deck. If this modification is permanently adopted and applied to other ships a future change may be the transfer of the elevator to the starboard side. The angled deck will be incorporated into the design of all new aircraft carriers.



ANTIETAM (showing angled or "canted" deck).

1955, U.S. Navy, Official.

No.	Name	Builders	Laid down	Launched	Completed
CVA 9	*Essex	Newport News S.B. & D.D. Co.	28 Apr. 1941	31 July 1942	31 Dec. 1942
CVA10	*Yorktown		1 Dec. 1941	21 Jan. 1943	15 May 1943
CVA11	*Intrepid		1 Dec. 1941	26 Apr. 1943	16 Aug. 1943
CVA12	*Hornet		3 Aug. 1942	29 Aug. 1943	29 Nov. 1943
CVS 13	*Franklin	Bethlehem Steel Co., Quincy	7 Dec. 1942	14 Oct. 1943	31 Jan. 1944
CVA14	<i>Ticonderoga</i>		1 Feb. 1943	7 Feb. 1944	10 Oct. 1944
CVA15	<i>Randolph</i>		10 May 1943	28 June 1944	9 Oct. 1944
CVA16	*Lexington		15 July 1941	26 Sept. 1942	17 Mar. 1943
CVS 17	*Bunker Hill	New York Navy Yard	15 Sept. 1941	7 Dec. 1942	24 May 1943
CVA18	*Wasp		18 Mar. 1942	17 Aug. 1943	24 Nov. 1943
CVA19	<i>Hancock</i>		26 Jan. 1943	24 Jan. 1944	15 Apr. 1944
CVA20	*Bennington		15 Dec. 1942	26 Feb. 1944	6 Aug. 1944
CVS 21	<i>Boxer</i>	Newport News Co.	13 Sept. 1943	14 Dec. 1944	16 Apr. 1945
CVA31	*B. H. Richard		1 Feb. 1943	29 Apr. 1944	26 Nov. 1944
CVS 32	<i>Leyte</i>		21 Feb. 1944	23 Aug. 1945	11 Apr. 1946
CVA33	<i>Keats</i>		1 Mar. 1944	5 May 1945	2 Mar. 1946
CVS 36	<i>Antietam</i>	Norfolk Navy Yard	15 Mar. 1943	20 Aug. 1944	28 Jan. 1945
CVS 37	<i>Princeton</i>		14 Sept. 1943	8 July 1945	18 Nov. 1945
CVA38	<i>Shangri-La</i>		15 Jan. 1943	24 Feb. 1944	15 Sept. 1944
CVA39	<i>Lake Champlain</i>		15 Mar. 1943	2 Nov. 1944	3 June 1945
CVS 40	<i>Tarawa</i>	Philadelphia Navy Yard	1 Mar. 1944	12 May 1945	8 Dec. 1945
CVS 45	<i>Valley Forge</i>		7 Sept. 1944	18 Nov. 1945	3 Nov. 1946
CVS 47	<i>Philippine Sea</i>		19 Aug. 1944	5 Sept. 1945	11 May 1946

\* Short hull type. All above ships originally designated CV were redesignated CVA (Attack Aircraft Carrier) in Oct. 1952, but *Antietam*, *Bunker Hill*, *Franklin* and *Leyte* were again redesignated from CVA to CVS (ASW Support Aircraft Carriers) in July 1953 ; *Princeton* and *Valley Forge* Jan. 1954.

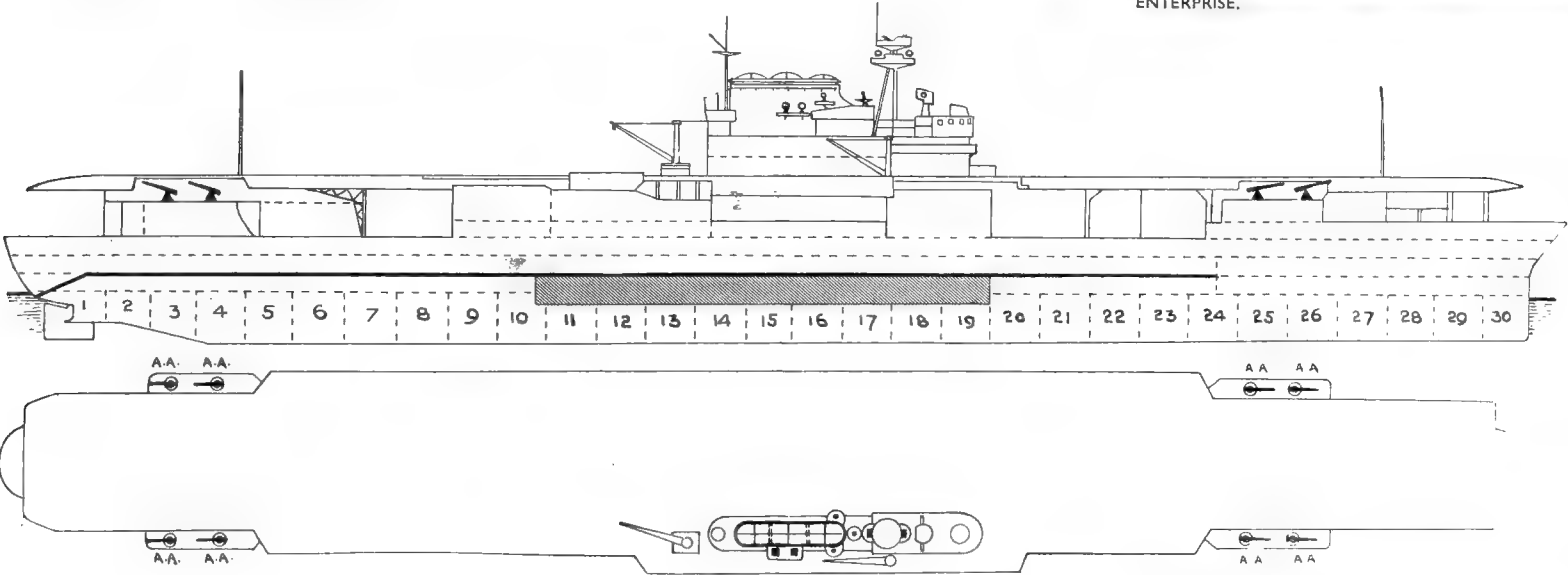
U.S.A.—Support Aircraft Carrier (CVS)

ASW Support Aircraft Carrier (CVS).

ENTERPRISE

Builders: Newport News Shipbuilding & Drydock Co  
Laid down: 16 July 1934  
Launched: 3 Oct. 1936  
Completed: End 1938

Displacement: 19,800 tons (25,500 tons full load)  
Dimensions: Length: 761 (pp.), 809½ (w.l.), 827 (o.a.) feet. Beam: 83½ feet (hull). Width: 114 (extreme) feet.  
Draught: 21½ (mean), 29 (max.) feet  
Guns: 8—5 inch, 38 cal. (d.p.). Many 40 mm. and 20 mm. AA  
Aircraft: 81–85 (space for over 100)  
Armour: 4" side waterline amidships (see notes)  
Machinery: Geared turbines. S.H.P.: 120,000 = 34 kts. (32.5 kts. designed)  
Boilers: 9 Babcock & Wilcox Express type  
Complement: Over 2,200 (war)

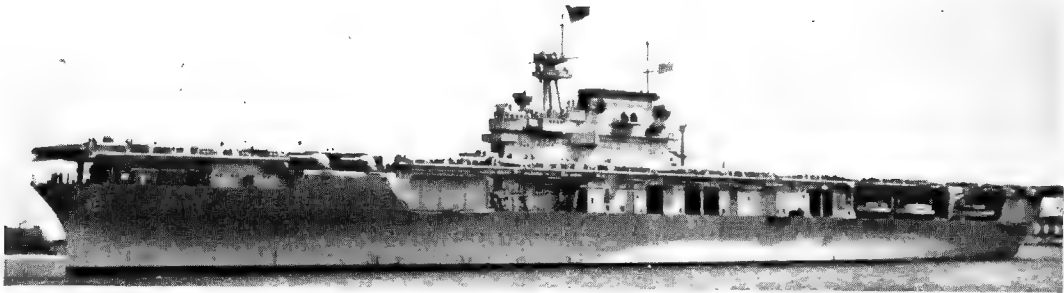


Note to Plan.—This shows starboard beam to illustrate details of funnel, etc.

General Notes.—No. CVS6. Commissioned May 12, 1938, but owing to serious mechanical defects, involving replacement of the reduction gearing and over 1,200 boiler tubes, final completion of *Enterprise* was delayed until late in 1938. Said to have cost about \$25,000,000. War losses: *Hornet*, *Yorktown*.

Aircraft Notes.—Aircraft can be catapulted from hangar deck as well as from flight deck, thus increasing the number that can be put into the air at short notice. There are 3 lifts from hangars to flight deck.

Armour Note.—There is a patch of side armour at water line over machinery and boiler spaces unofficially reported to be 4" and a heavy protective deck.



ENTERPRISE.

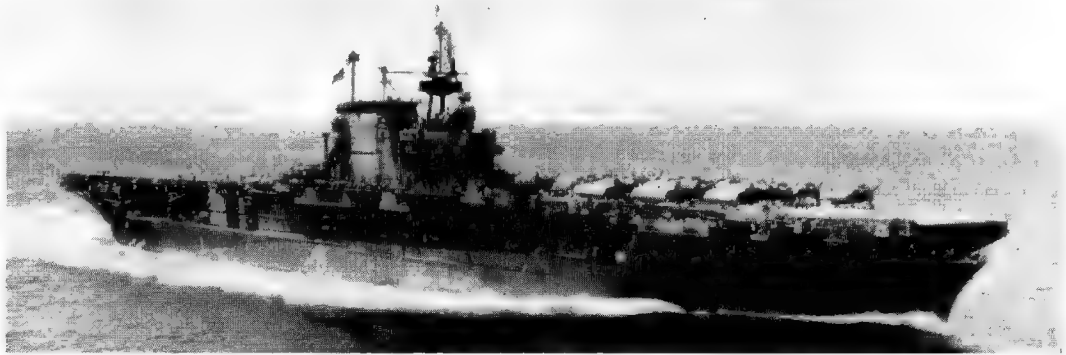
Added 1953, U.S. Navy, Official.

Note.

The *Enterprise*, which is comparatively elderly and has seen strenuous service, is the sole survivor of the pre-war aircraft carriers. She was to have been demilitarised and given to the State of New York, being retained as a naval relic in consideration of her fine war record in 1942-45. This plan is being held in abeyance.

She has been inactivated, and is laid up in a state of preservation as a potential fighting ship, being berthed at New York as flagship of the Atlantic Reserve Fleet.

Reclassified as an Attack Aircraft Carrier, CVA, in Oct. 1952, but again reclassified as an ASW Support Aircraft Carrier, CVS, in July 1953, and in the event of war she would be employed on anti-submarine warfare and fleet support duties.



ENTERPRISE.

Added 1950, U.S. Navy, Official.



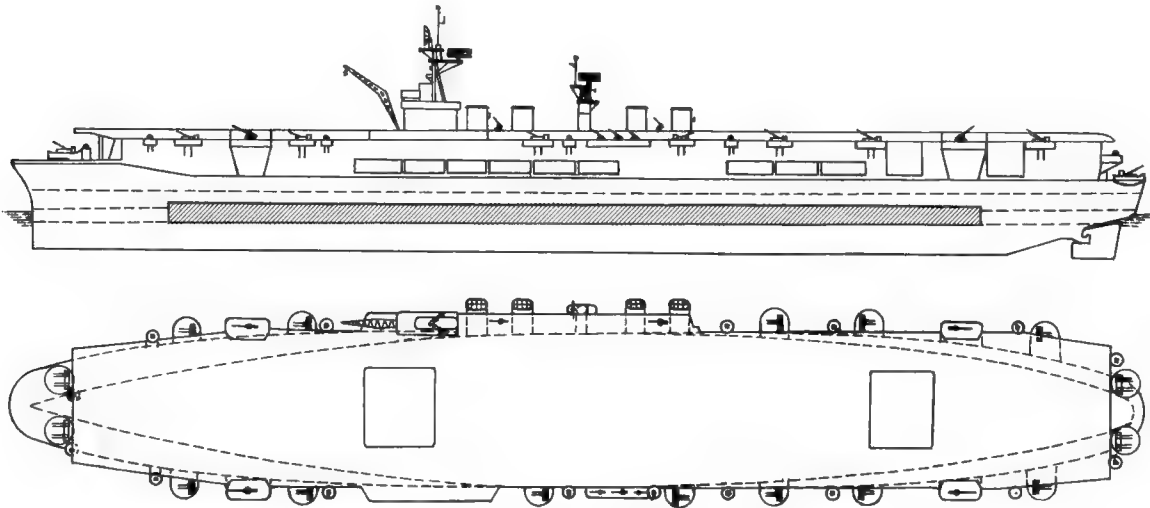
Small Aircraft Carriers (CVL).

2 “Saipan” Class.

SAIPAN

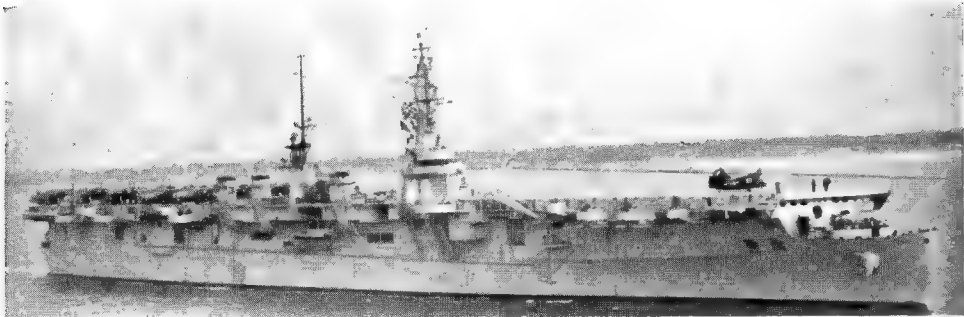
Displacement: 14,500 tons (18,760 tons full load)  
Dimensions: Length: 683½ (o.a.) feet. Beam: 76½ feet (hull). Width: 115 (extreme) feet Draught: 25 (max.) feet  
Guns: 40—40 mm. AA., 32—20 mm. AA.  
Aircraft: Over 50  
Machinery: Geared turbines. 4 shafts. S.H.P.: 120,000 = 33 kts.  
Boilers: 8 Babcock & Wilcox  
Fuel: 2,400 tons  
Complement: 1,763 (war)

WRIGHT



**Note to Plan.**—Both *Saipan* and *Wright* now have only three funnels.  
**General Notes.**—Modifications of the “Baltimore” class heavy cruiser design laid down as CVLs. Hull below main (hangar) deck duplicates the Camden-built CA 130–133. *Saipan* is employed as an experimental ship for testing jet-propelled aircraft, as well as improvements in radar equipment. She recently operated successfully a squadron of McDonnell Phantom fighters. *Wright* has recently been used for training purposes. Both ships had four funnels but have had fore funnel removed (see photos of *Saipan* top right).

No.	Name	Builders and Machinery	Laid down	Launched	Completed
CVL 48	<i>Saipan</i>	New York S.B. Corpn.	10 July 1944	8 July 1945	14 July 1946
49	<i>Wright</i>		21 Aug. 1944	1 Sept. 1945	9 Feb 1947



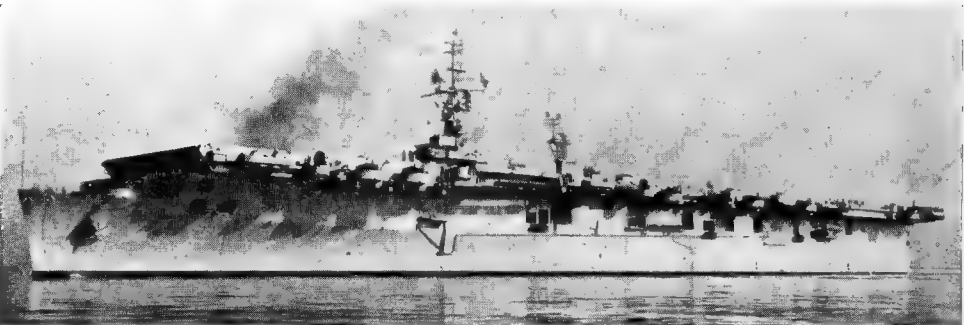
SAIPAN.

1953, P. Sweeney.



SAIPAN.

1952, courtesy Godfrey H. Walker Esq.



WRIGHT.

Added 1950, U.S. Navy, Official.

U.S.A.—Small Aircraft Carriers (CVL)

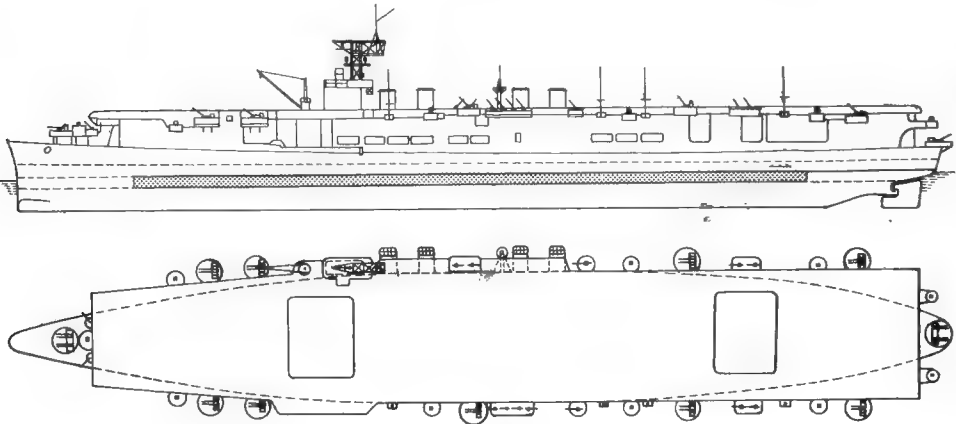
Small Aircraft Carriers (CVL).

5 "Cowpens " Class.

**BATAAN** (ex-*Buffalo*)  
**CABOT** (ex-*Wilmington*)

**COWPENS** (ex-*Huntington*)  
**MONTEREY** (ex-*Dayton*)  
**SAN JACINTO** (ex-*Reprisal*, ex-*Newark*)

Displacement: 11,000 tons (15,800 tons full load)  
Dimensions: Length: 600 (w.l.), 623 (o.a.) feet. Beam: 71½ feet (hull). Width: 109 (extreme) feet.  
Draught: 20 (mean) 26 (max.) feet  
Guns: 16—40 mm. AA., 40—20 mm. AA.  
Aircraft: 40 (Bataan 26, see notes)  
Machinery: Geared turbines. 4 shafts. S.H.P.: 100,000 = 32 kts.  
Boilers: 8 Babcock & Wilcox  
Complement: 1,183 (peace). 1,400 (war)



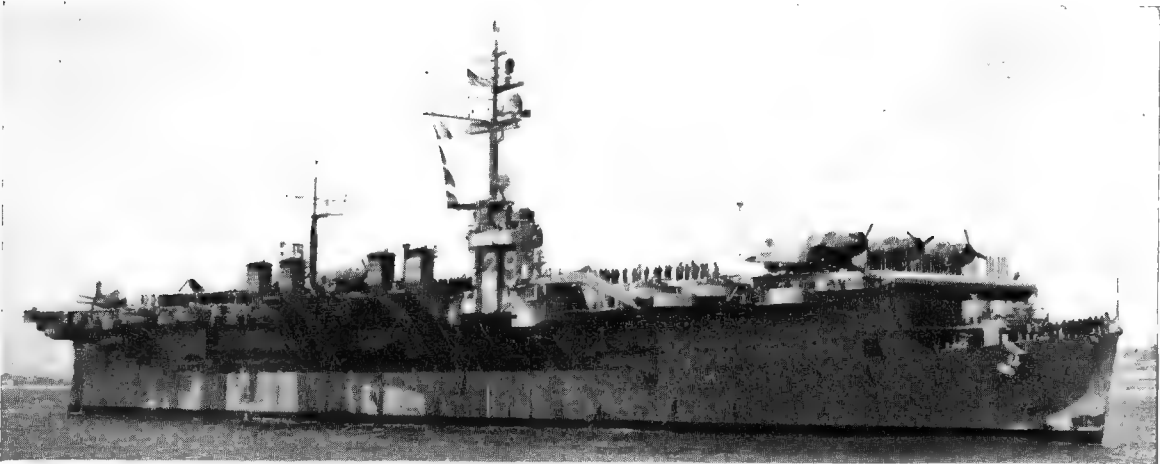
Notes to Plan—Since conversion Cabot has had only two funnels.

General Notes.—These vessels were all laid down as light cruisers of the "Cleveland" class, described on a later page, but were ordered to be completed as aircraft carriers. *Princeton* (CVL 23, ex-*Tallahassee*), lost in action. *Bataan* and *Cabot* are converted to ASW, i.e. modified to enable them to specialise in anti-submarine warfare, and are now classed as "Hunter-Killer Carriers." *Bataan* recommissioned May 13, 1950. She now has strengthened flight and hangar decks, large port side catapult, revised magazine arrangements, new electronic gear, and corrected stability to counter added top weight. Maximum 26 aircraft. Both ships have been practically modernised to a new type. *Langley* was transferred to the French Navy in 1951 under the Mutual Defense Assistance Program. The *Belleau Wood* of this class was transferred to France in September, 1953, having been loaned for five years.

Gunnery Note.—Were originally designed to include 4—5 inch in armament.

Experimental Notes.—*Independence*, CVL 22, utilized for Bikini atom-bomb experiments, 1946, was retained by the Navy, although a hulk, as part of the radiological laboratory at the San Francisco Naval Shipyard until 30 Jan. 1951 when she was towed to sea and sunk on an experimental weapon test.

No.	Name	Builders and Machinery	Laid down	Launched	Completed
CVL 25	Cowpens	New York S.B. Corpn.	17 Nov. 1941	17 Jan. 1943	28 May 1943
26	Monterey		29 Dec. 1941	28 Feb. 1943	17 June 1943
28	Cabot		16 Aug. 1942	4 Apr. 1943	24 July 1943
29	Bataan		31 Aug. 1942	1 Aug. 1943	17 Nov. 1943
30	San Jacinto		26 Oct. 1942	26 Sept. 1943	15 Dec. 1943



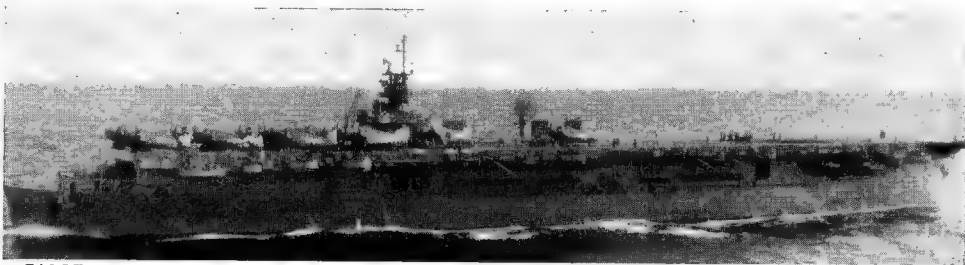
BATAAN.

1951, U.S. Navy, Official.



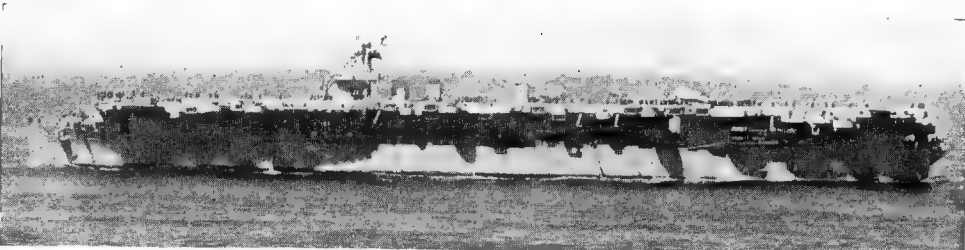
MONTEREY.

Added 1951, U.S. Navy, Official.



CABOT. (now has only two funnels)

Added 1950, U.S. Navy, Official.



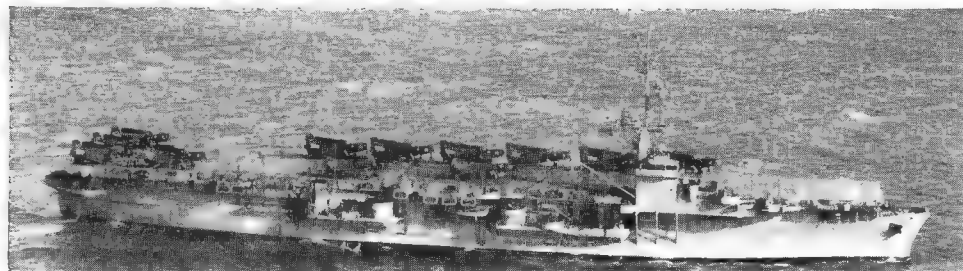
COWPENS.

1944, U.S. Navy, Official.

## Escort Aircraft Carriers (CVE).

Note.—The planned construction and conversion programme for the Fiscal Year 1955 (1 July 1954 to 30 June 1955) subject to appropriations to be approved by Congress, includes the conversion of one escort carrier (CVE) to a helicopter transport to be used by the Marine Corps in amphibious landings. The converted CVE will not only provide coverage for helicopters but also take care of the assault troops.

### 19 "Commencement Bay" Class.



MINDORO.

1953, Skyfotos.

**BADOENG STRAIT** (ex-San Alberto Bay)  
**BAIROKO** (ex-Portage Bay)  
**BLOCK ISLAND** (ex-Sunset Bay)  
**CAPE GLOUCESTER** (ex-Willapa Bay)  
**COMMENCEMENT BAY** (ex-St. Joseph's Bay)  
**GILBERT ISLANDS** (ex-St. Andrew's Bay)  
**KULA GULF** (ex-Vermilion Bay)  
**MINDORO**  
**PALAU**

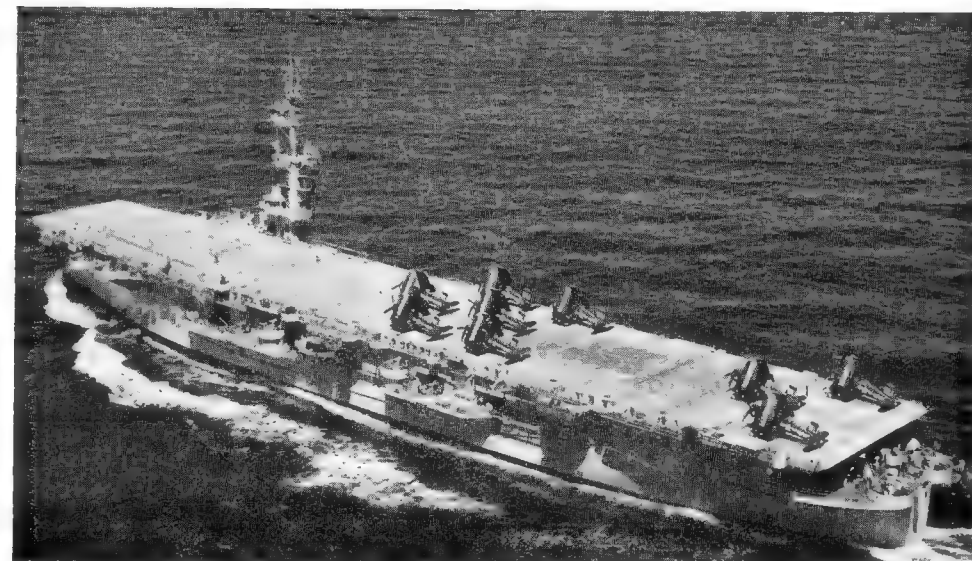
**POINT CRUZ** (ex-Trocadero Bay)  
**PUGET SOUND** (ex-Hobart Bay)  
**RABAU**  
**RENDOVA** (ex-Mosser Bay)  
**SAIDOR** (ex-Salter Bay)  
**SALERNO BAY** (ex-Winjah Bay)  
**SIBONEY** (ex-Frosty Bay)  
**SICILY** (ex-Sandy Bay)  
**TINIAN**  
**VELLA GULF** (ex-Totem Bay)

Displacement: 11,373 tons (24,275 tons full load)  
 Dimensions: Length: 557 (o.a.) feet. Beam: 75 feet (hull). Width: 105 feet (extreme). Draught: 30½ (max.) feet  
 Guns: 1—5 inch, 38 cal., 24—40 mm. AA., 24—20 mm. AA., 4 rocket launchers  
 Aircraft: 34  
 Machinery: Geared turbines. 2 shafts. S.H.P.: 16,000 = 19 kts.  
 Complement: 924 (peace). Over 1,000 (war)

General Notes.—All built by Todd Pacific Shipyards, Tacoma. Design modelled on that of "Suwanee" class, see later page. Sixteen more ships of this class, Bastogne, Eniwetok, Lingayen, Okinawa, and CVE 128-139, were cancelled in Aug. 1945.

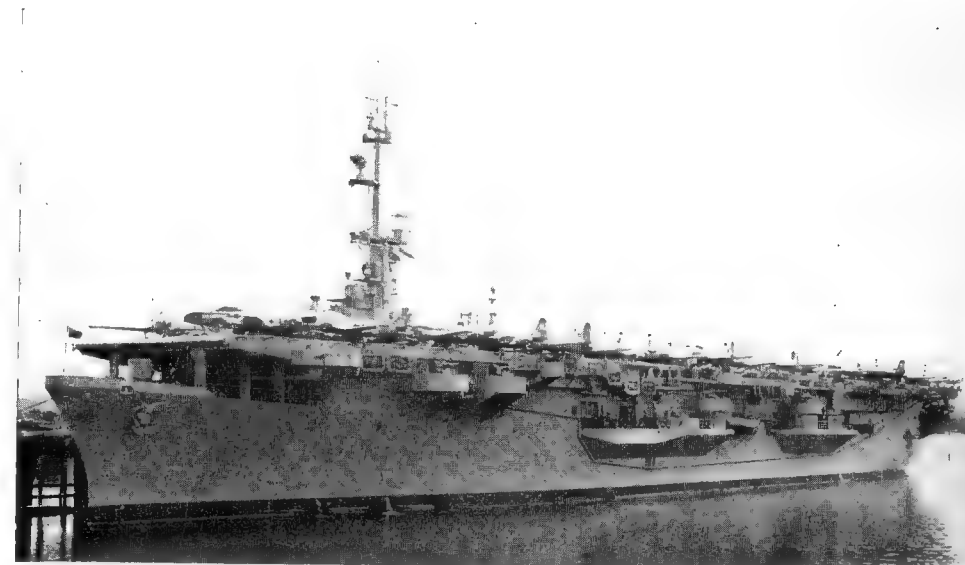
Gunnery Notes.—After starboard 5 inch gun has been removed from active units. No. 1 Bofors 40 mm. mounting removed. 12 Oerlikon 20 mm. twin mounts now instead of former total of 30. Four rocket launchers now located amidships, two on each side.

No.	Name	Laid down	Launched	Completed
CVE 105	Commencement Bay	23 Sept. 1943	9 May 1944	27 Nov. 1944
106	Block Island	25 Oct. 1943	10 June 1944	30 Dec. 1944
107	Gilbert Islands	29 Nov. 1943	20 July 1944	5 Feb. 1945
108	Kula Gulf	16 Dec. 1943	15 Aug. 1944	12 May 1945
109	Cape Gloucester	10 Jan. 1944	12 Sept. 1944	5 Mar. 1945
110	Salerno Bay	7 Feb. 1944	26 Sept. 1944	19 May 1945
111	Vella Gulf	7 Mar. 1944	19 Oct. 1944	9 Apr. 1945
112	Siboney	1 Apr. 1944	9 Nov. 1944	14 May 1945
113	Puget Sound	12 May 1944	30 Nov. 1944	18 June 1945
114	Rendova	15 June 1944	28 Dec. 1944	22 Oct. 1945
115	Bairoko	25 July 1944	25 Jan. 1945	16 July 1945
116	Badoeng Strait	18 Aug. 1944	15 Feb. 1945	14 Nov. 1945
117	Saidor	29 Sept. 1944	17 Mar. 1945	4 Sept. 1945
118	Sicily	23 Oct. 1944	14 Apr. 1945	27 Feb. 1945
119	Point Cruz	4 Dec. 1944	18 May 1945	16 Oct. 1946
120	Mindoro	2 Jan. 1945	27 June 1945	22 Dec. 1945
121	Rabaul	29 Jan. 1945	14 July 1945	30 Aug. 1946
122	Palau	19 Feb. 1945	6 Aug. 1945	15 Jan. 1946
123	Tinian	20 Mar. 1945	5 Sept. 1945	30 July 1946



RENDOVA.

1953, U.S. Navy, Official.

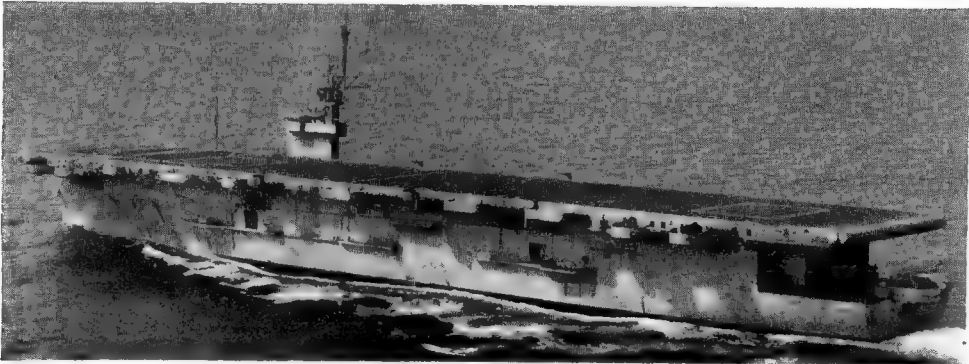


SICILY.

Added 1951, U.S. Navy, Official.

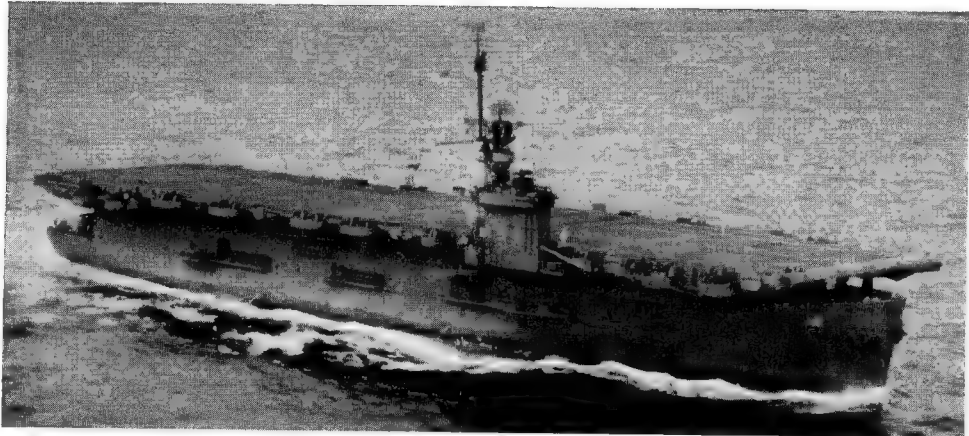
U.S.A.—Escort Aircraft Carriers (CVE)

34 “Anzio” Class.



TRIPOLI.

1953, Skyfotos.



CORREGIDOR.

Added 1950, U.S. Navy Official.

**ANZIO** (ex-Coral Sea, ex-Alikula Bay)  
**BOUGAINVILLE** (ex-Didrickson Bay)  
**CAPE ESPERANCE** (ex-Tananek Bay)  
**CORREGIDOR** (ex-Atheling, ex-Anguilla Bay)  
**FANSHAW BAY**  
**GUADALCANAL** (ex-Astrolabe Bay)  
**HOGGATT BAY**  
**HOLLANDIA** (ex-Astrolabe Bay)  
**KADASHAN BAY**  
**KASAAN BAY**  
**KWAJALEIN** (ex-Bucareli Bay)  
**LUNGA POINT** (ex-Alazon Bay)  
**MAKASSAR STRAIT** (ex-Ulitaka Bay)  
**MANILA BAY** (ex-Bucareli Bay)  
**MARCUS ISLAND** (ex-Kanalku Bay)  
**MATANIKAU** (ex-Dolomi Bay)  
**MISSION BAY** (ex-Atheling)

**MUNDA** (ex-Tonowek Bay)  
**NATOMA BAY** (ex-Begum)  
**NEHENTA BAY** (ex-Khedive)  
**PETROF BAY**  
**RUDYERD BAY**  
**SAGINAW BAY**  
**SARGENT BAY**  
**SAVO ISLAND** (ex-Kaita Bay)  
**SHAMROCK BAY**  
**SHIPLEY BAY**  
**SITKOH BAY**  
**STEAMER BAY**  
**TAKANIS BAY**  
**THETIS BAY**  
**TRIPOLI** (ex-Didrickson Bay)  
**WHITE PLAINS** (ex-Elbour Bay)  
**WINDHAM BAY**

Displacement: 7,800 tons standard (13,400 tons full load)  
Dimensions: Length: 487 (pp.), 492 (w.o.), 512 (o.a.) feet. Beam: 65 feet (hull). Width: 108 feet (extreme)  
Draught: 19½ (max.) feet  
Guns: 1—5 inch, 38 cal., 24—20 mm AA. (Later ships have 8—40 mm. AA., 24—20 mm. AA.)  
Aircraft: 30  
Machinery: Skinner Unaflo (reciprocating) engines. 2 shafts. I.H.P.: 11,200 = 19.5 kts.  
Complement: 643 (peace). Over 800 (war)

Notes.—Designed as aircraft carriers, all these ships were built by the Henry J. Kaiser Co., Inc., at Vancouver, Wash. or by the Oregon S.B. Corp. at Portland, Oregon. They are of an improved design, differing from converted ships of “Bogue” class, which were found difficult to land upon in light airs. War losses: Bismarck Sea (CVE 95), Gambier Bay (73), Liscome Bay (56), Ommaney Bay (79), St. Lo (63). Sold or scrapped since: Admiralty Islands, Attu, Casablanca, Kalinin Bay, Kitkun Bay, Makin Island, Roi, Salamaua, Solomons, Tulagi, Wake Island.

No.	Name	Laid down	Launched	Completed
CVE 57	Anzio	12 Dec. 1942	1 May 1943	27 Aug. 1943
58*	Corregidor	17 Nov. 1942	12 May 1943	31 Aug. 1943
59	Mission Bay	28 Dec. 1942	26 May 1943	13 Sept. 1943
60	Guadalcanal	5 Jan. 1943	5 June 1943	25 Sept. 1943
61	Manila Bay	15 Jan. 1943	10 July 1943	5 Oct. 1943
62	Natoma Bay	17 Jan. 1943	20 July 1943	14 Oct. 1943
64*	Tripoli	1 Feb. 1943	2 Sept. 1943	31 Oct. 1943
66	White Plains	11 Feb. 1943	27 Sept. 1943	15 Nov. 1943
69	Kasaan Bay	11 May 1943	24 Oct. 1943	4 Dec. 1943
70	Fanshaw Bay	18 May 1943	1 Nov. 1943	9 Dec. 1943
74	Nehenta Bay	20 July 1943	28 Nov. 1943	3 Jan. 1944
75	Hoggatt Bay	17 Aug. 1943	4 Dec. 1943	11 Jan. 1944
76	Kadashan Bay	2 Sept. 1943	11 Dec. 1943	18 Jan. 1944
77	Marcus Island	15 Sept. 1943	16 Dec. 1943	26 Jan. 1944
78	Savo Island	27 Sept. 1943	22 Dec. 1943	3 Feb. 1944
80	Petrof Bay	15 Oct. 1943	5 Jan. 1944	18 Feb. 1944
81	Rudyerd Bay	24 Oct. 1943	12 Jan. 1944	25 Feb. 1944
82	Saginaw Bay	1 Nov. 1943	19 Jan. 1944	2 Mar. 1944
83	Sargent Bay	8 Nov. 1943	31 Jan. 1944	9 Mar. 1944
84	Shamrock Bay	15 Nov. 1943	4 Feb. 1944	15 Mar. 1944
85	Shipley Bay	22 Nov. 1943	12 Feb. 1944	21 Mar. 1944
86	Sitkoh Bay	28 Nov. 1943	19 Feb. 1944	28 Mar. 1944
87	Steamer Bay	4 Dec. 1943	26 Feb. 1944	4 Apr. 1944
88	Cape Esperance	11 Dec. 1943	3 Mar. 1944	9 Apr. 1944
89	Takanis Bay	16 Dec. 1943	10 Mar. 1944	15 Apr. 1944
90	Thetis Bay	22 Dec. 1943	16 Mar. 1944	21 Apr. 1944
91	Makassar Strait	29 Dec. 1943	22 Mar. 1944	27 Apr. 1944
92*	Windham Bay	5 Jan. 1944	29 Mar. 1944	3 May 1944
94	Lunga Point	19 Jan. 1944	11 Apr. 1944	14 May 1944
97	Hollandia	12 Feb. 1944	28 Apr. 1944	1 June 1944
98	Kwajalein	19 Feb. 1944	4 May 1944	7 June 1944
100	Bougainville	3 Mar. 1944	16 May 1944	18 June 1944
101	Matanikau	10 Mar. 1944	22 May 1944	24 June 1944
104	Munda	29 Mar. 1944	8 June 1944	8 July 1944

\* Corregidor, Tripoli and Windham Bay are assigned to Military Sea Transportation Service, and serve as Aircraft Ferry Ships. Other out of commission, in reserve. Cape Esperance, Sitkoh Bay decommissioned to Reserve Fleet 1954.

### Escort Aircraft Carriers (CVE).

9 "Bogue" Class.



BOGUE.

Added 1951, U.S. Navy, Official.



ALTAMAHA. (Observe funnel.)

1944, U.S. Navy, Official.

**ALTAMAHA**  
**BARNES**  
**BOGUE** (ex-Steel Advocate)

**BRETON**  
**CARD**  
**COPAHEE** (ex-Steel Architect)

**CORE**  
**CROATAN**  
**NASSAU**

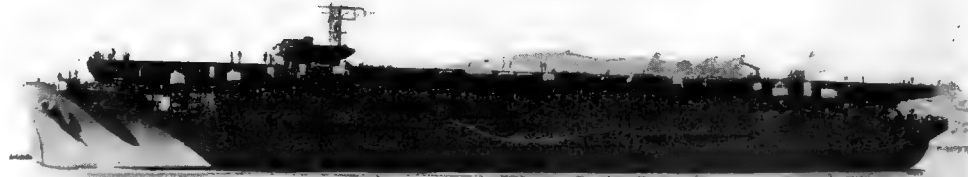
Displacement: 9,800 tons (15,700 tons full load)  
Dimensions: Length: 465 (pp.), 496 (o.a.) feet. Beam: 69½ feet (hull). Width: 112 feet (extreme).  
Draught: 26 (max.) feet  
Guns: 1 or 2—5 inch, 51 cal., 16—40 mm. Bofors, 20—20 mm. Oerlikon  
Aircraft: 30  
Machinery: Westinghouse geared turbines. S.H.P.: 8,500 = 18 kts.  
Boilers: Foster Wheeler type  
Complement: 800

Notes.—All converted from mercantile hulls built by Seattle-Tacoma S.B. Corp., and vary slightly in appearance. Flight deck is 450 feet long. All are named after sounds. These vessels are equipped with derricks for retrieving seaplanes. Out of commission, in reserve.

No.	Name	Laid down	Launched	Completed
CVE 9	Bogue	1 Oct. 1941	15 Jan. 1942	26 Sept. 1942
11	Card	27 Oct. 1941	21 Feb. 1942	8 Nov. 1942
12	Copahee	18 June 1941	21 Oct. 1941	2 Sept. 1942
13	Core	2 Jan. 1942	15 May 1942	10 Dec. 1942
16	Nassau	27 Nov. 1941	4 Apr. 1942	20 Aug. 1942
18	Altamaha	19 Dec. 1941	22 May 1942	15 Sept. 1942
20	Barnes	19 Jan. 1942	22 May 1942	20 Feb. 1943
23	Breton	25 Feb. 1942	27 June 1942	12 Apr. 1943
25	Croatan	15 Apr. 1942	3 Aug. 1942	28 Apr. 1943

### Escort Aircraft Carrier (CVE).

I "Prince William" Class.



PRINCE WILLIAM.

Added 1950, U.S. Navy, Official.

#### PRINCE WILLIAM

Builders: Seattle-Tacoma Yard  
Laid down: 18 May 1942  
Launched: 23 Aug. 1942  
Completed: 9 April 1943  
Displacement: 8,333 tons (14,000 tons full load)  
Dimensions: Length: 465 (pp.), 496 (o.a.) feet. Beam: 69½ feet (hull). Width: 112 feet (extreme).  
Draught: 26 (mean) feet  
Guns: 2—5 inch, 38 cal.  
Aircraft: 30  
Machinery: Geared turbines. 1 shaft. S.H.P.: 8,500 = 18 kts.  
Boilers: Foster-Wheeler  
Oil fuel: 3,290 tons  
Complement: 646 (peace). Over 800 (war)

Notes.—CVE 31. Commissioned April 9, 1943. Similar to "Bogue" class. Converted from mercantile hull by Seattle-Tacoma S.B. Corporation. Same type as "Ruler" class, which served in Royal Navy during the war. Can carry up to 90 aircraft when used as a ferry carrier. Out of commission in reserve.

3 "Suwanee" Class.



SUWANEE.

Added 1950, U.S. Navy, Official.

**CHENANGO** (ex-Esso New Orleans)

**SANTEE** (ex-Seakay)

**SUWANEE** (ex-Markay)

Displacement: 11,400 tons (24,275 tons full load)  
Dimensions: Length: 553 (o.a.) feet. Beam: 75 feet (hull). Width: 114 feet (extreme). Draught: 30½ (max.) feet  
Guns: 1 or 2—5 inch, 51 cal., 8—40 mm. AA., 15—20 mm. AA.  
Aircraft: 34  
Machinery: Geared turbines. 2 shafts. S.H.P.: 13,500 = 18 kts  
Complement: 790 (peace). Over 1,000 (war)

Notes.—Ex-fleet oilers converted into Aircraft Carriers with two lifts and a catapult. Propelling machinery is aft. Out of commission in reserve. Sangamon of this class was reconverted to a tanker after the war and sold.

No.	Name	Ex-No.	Builders	Launched	Acquired	Completed
CVE 27	Suwanee	AO 33	Federal Shipbuilding Co	4 Mar. 1939	26 June 1941	24 Sept. 1942
CVE 28	Chenango	AO 31	Sun, Chester	4 Jan. 1939	31 May 1941	19 Sept. 1942
CVE 29	Santee	AO 29		4 Mar. 1939	30 Oct. 1940	24 Aug. 1942



U.S.A.—Battleships (BB)

Battleships (BB).

“Iowa” Class.

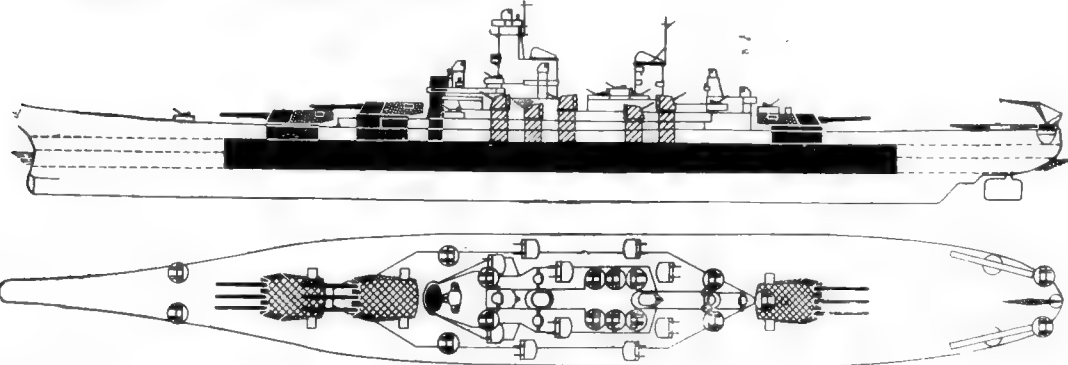
4 + 1 SHIPS.

IOWA  
MISSOURI

NEW JERSEY  
WISCONSIN

KENTUCKY (Suspended)

Displacement: 45,000 tons standard (57,450 tons full load first two, 57,216 tons second pair)  
Dimensions: Length: 861½ (pp.), 887½ (o.a.), New Jersey 888 (o.a.) feet. Beam: 108 feet. Draught: 38 feet (max.)  
Guns: 9—16 inch, 50 cal., 20—5 inch, 38 cal., 80—40 mm. AA. (will carry 30—3 inch, 50 cal. guns in place of 40 mm. mounts)  
Aircraft: 2 helicopters  
Armour: 19”-16” side, otherwise more extensive than in “South Dakota” class  
Machinery: Geared turbines. 4 shafts. S.H.P.: 212,000 = 33 kts.  
Boilers: 8 Babcock & Wilcox  
Oil fuel: 8,800 tons  
Complement: 2,000 (peace). 2,700 (war)



**Note to Plan.**—Catapults now removed. (Helicopters replace catapult observation aircraft which were formerly standard).

**General Notes.**—All ordered under 1940 Programme. Inclusive cost officially stated to exceed \$100,000,000 each. *Iowa* and *New Jersey* were each built in 2½ years, same period as occupied by the *Alabama*, a smaller ship. Construction of *Kentucky*, after being suspended for a time, was resumed in Dec. 1944, only to be arrested again in Aug., 1946, and resumed once more on Aug., 17, 1948; while the *Illinois* (65), authorised in 1940 and ordered from Philadelphia Navy Yard in Dec., 1942, was cancelled when 22% complete, on 11 Aug., 1945. *Missouri* decommissioned to Pacific Reserve Fleet autumn 1954.

**Gunnery Notes.**—16 inch guns have a range of 23 miles. Quick firing 3 inch guns are to replace some of the former 40 mm. AA. batteries.

**Engineering Notes.**—High pressure large boilers. Speeds of 35 kts. have been reached in service.

**Appearance Notes.**—*New Jersey* has a tripod mainmast stepped against her after-funnel to accommodate flag-hoists. *Iowa* and *Missouri* have been similarly equipped.

**Special Note.**—*Kentucky*'s armament was to have been modified to include a number of guided missiles, but work was stopped and although construction was intermittently resumed, this was merely to free the dry dock in which she was built. As a battleship she was 70% complete with machinery installed. She was floated out from her building dock on Jan. 20, 1950, to be laid up in Norfolk, and is being retained in her present condition for eventual completion if a future emergency arises. She cannot be scrapped without the approval of Congress or the House Armed Services Committee. No work is being done on her.

No.	Name	Builders	Machinery	Laid down	Launched	Completed
BB 61	<i>Iowa</i>	New York Navy Yard	General Electric Co.	27 June 1940	27 Aug. 1942	22 Feb. 1943
62	<i>New Jersey</i>	Philadelphia Navy Yard	Westinghouse Co.	16 Sept. 1940	7 Dec. 1942	23 May 1943
63	<i>Missouri</i>	New York Navy Yard	General Electric Co.	6 Jan. 1941	29 Jan. 1944	11 June 1944
64	<i>Wisconsin</i>	Philadelphia Navy Yard	Westinghouse Co.	25 Jan. 1941	7 Dec. 1943	16 April 1944
66	<i>Kentucky</i>	Norfolk Navy Yard	Westinghouse Co.	6 Dec. 1942	20 Jan. 1950	



MISSOURI.

1951, U.S. Navy, Official.



IOWA.

1953, U.S. Navy, Official.



NEW JERSEY

1951, U.S. Navy, Official.

# Battleships (BB)—continued.

## SOUTH DAKOTA

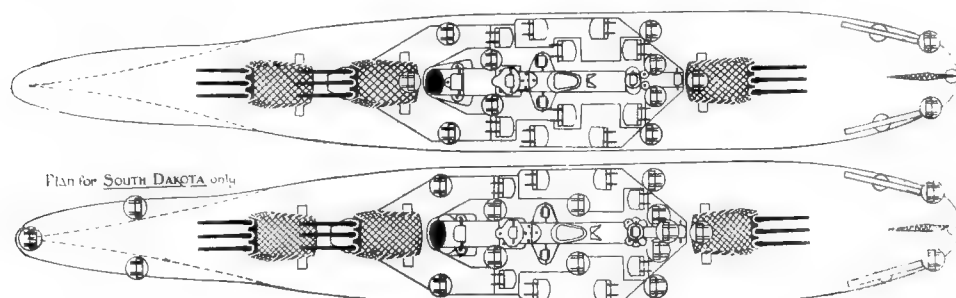
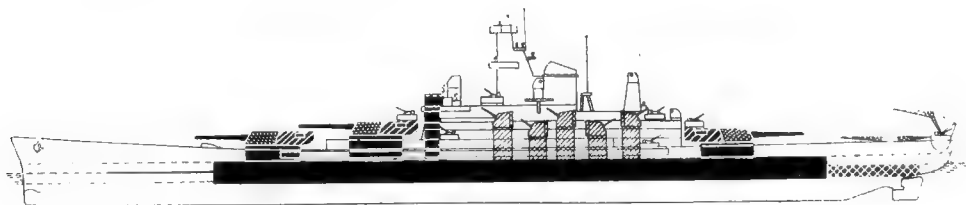
### 3 "Indiana" Class.

## ALABAMA

## INDIANA

## MASSACHUSETTS

Displacement: 35,000 tons *standard* (44,374 tons *full load* except *Massachusetts*, 45,216 tons *full load*)  
 Dimensions: Length: 680 feet (o.a.). Beam: 108½ feet. Draught: 36 feet (max.)  
 Guns: 9—16 inch, 45 cal., 20—5 inch, 38 cal., d.p. (*South Dakota* has only 16), 56—40 mm. AA., (*South Dakota*, 68), 40—20 mm. AA.  
 Aircraft: 3  
 Catapults: 2  
 Armour: 18"—16" side, 18" turrets, 6" upper deck, 4" main deck  
 Machinery: Geared turbines. 4 shafts. S.H.P.: 130,000 = 28 kts.  
 Boilers: Babcock & Wilcox in *South Dakota* and *Massachusetts*; Foster Wheeler in *Indiana* and *Alabama* (working pressure reported as 600 lb. per sq. inch with 400 degrees of superheat)  
 Complement: 1,808 peace). 2,500 (war)



**General Notes.**—Ordered under 1938 Program. Cost over \$77,000,000 each. These ships are a modification of "North Carolina" class design with increased freeboard and reduced length, embodying several improvements. *Alabama* was built in 2½ years from date of laying keel. *South Dakota* played a prominent part in naval victory over Japanese squadron in Battle of Guadalcanal, Nov. 13–15, 1942. All out of commission, in reserve.

**Gunnery Notes.**—The outstanding feature of these ships was the large number of 40 mm. Bofors and 20 mm. Oerlikon guns included in the AA. armament. The 5 inch guns are mounted at a higher level than in *North Carolina* and *Washington*.

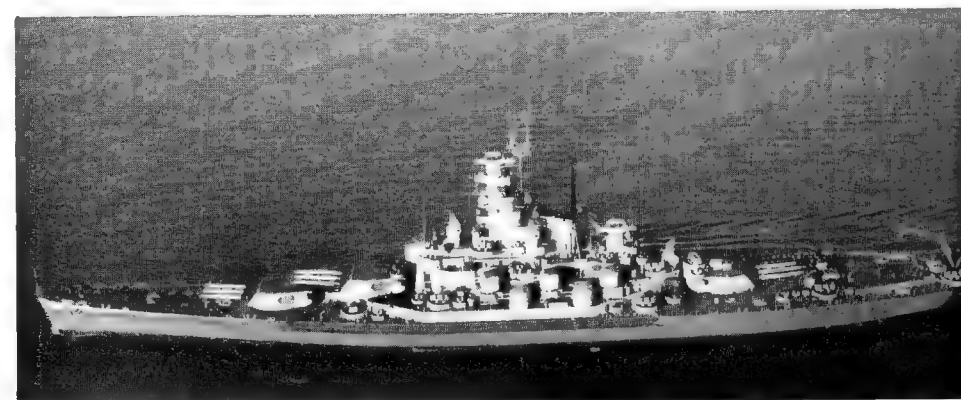
**Armour Notes.**—Understood that these ships have enhanced protection as compared with "North Carolina" class.

No.	Name	Builders	Machinery	Laid down	Launched	Completed
BB 57	<i>South Dakota</i>	New York S.B. Corpn.	Gen. Electric Co.	5 July 1939	7 June 1941	16 Aug. 1942
58	<i>Indiana</i>	Newport News Co.	Westinghouse Co.	20 Nov. 1939	21 Nov. 1941	Oct. 1942
59	<i>Massachusetts</i>	Bethlehem Steel Co. (Quincy)	Gen. Electric Co.	20 July 1939	23 Sept. 1941	Sept. 1942
60	<i>Alabama</i>	Norfolk Navy Yard	Westinghouse Co.	1 Feb. 1940	16 Feb. 1942	Nov. 1942



SOUTH DAKOTA.

Added 1949, U.S. Navy, Official.



MASSACHUSETTS.

Added 1949, U.S. Navy, Official.

U.S.A.—Battleships (BB)

Battleships (BB)—continued.

2 “ North Carolina ” Class.

NORTH CAROLINA

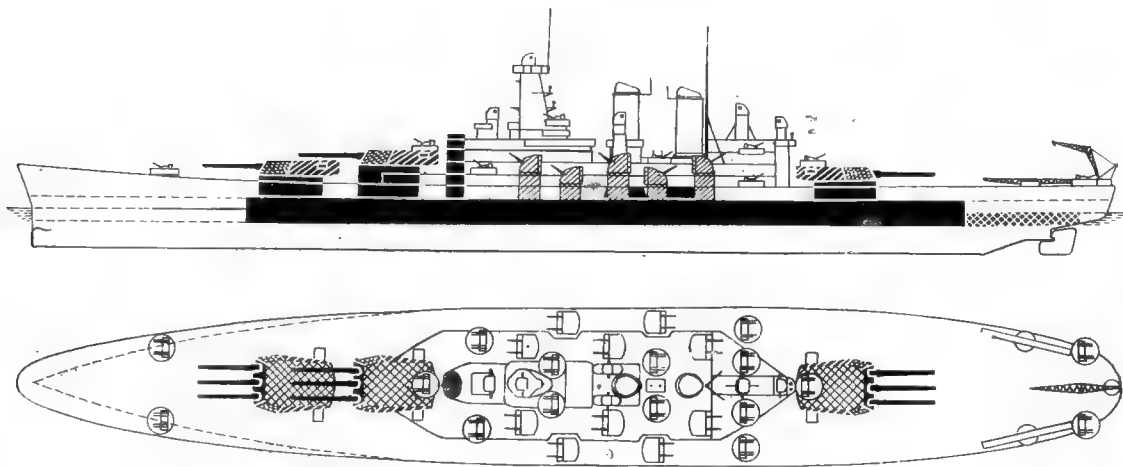
WASHINGTON

Displacement : 35,000 tons standard (46,770 tons full load, North Carolina, 45,370 tons full load, Washington)  
Dimensions : Length : 704 (w.l.), 729 (o.a.) feet. Beam : 108 feet.  
Draught : 26½ (mean), 35 (max.) feet  
Guns : 9—16 inch, 45 cal., 20—5 inch, 38 cal., d.p.  
60—40 mm. AA., 56—20 mm. AA.  
Aircraft : 3  
Catapults : 2  
Armour (unofficial) : 16” side amidships, 18” turrets, 6” upper deck, 4” main deck.  
Triple hull below w.l. and internal bulges  
Machinery : Geared turbines. 4 shafts. S.H.P. : 121,000 = 28 kts.  
Boilers : 8 Babcock & Wilcox of a new pattern (working pressure reported to be 600 lb. per sq. inch, with 850 degrees of superheat)  
Complement : 2,500 (war)



WASHINGTON.

Added 1954 U.S. Navy, Official.



General Notes.—Ordered under 1936 Programme. Cost \$76,885,750. Delays in laying down these ships were due to changes in design, late delivery of materials and necessity for extending and strengthening building slips. Ships are fully 35 per cent. welded. Engine room is arranged on a novel plan to save weight. Both ships at Naval Shipyard Annex at Bayonne in inactivated Atlantic Reserve Fleet.

Gunnery Notes.—16-inch are a new model, reported to weigh 125 tons Each turret weighs 650 tons complete

Engineering Notes.—Weight of machinery has been reduced in comparison with earlier battleships. Steam pressures and temperatures are reported to be greater than in any previous battleship.



NORTH CAROLINA.

Added 1950, U.S. Navy, Official.

No.	Name	Builders	Machinery	Laid down	Launched	Completed
BB 55	North Carolina	New York Navy Yard	General Electric Co.	27 Oct. 1937	13 June 1940	Aug. 1941
56	Washington	Philadelphia Navy Yard	General Electric Co.	14 June 1938	1 June 1940	Mar. 1942

Battleships (BB)—continued.

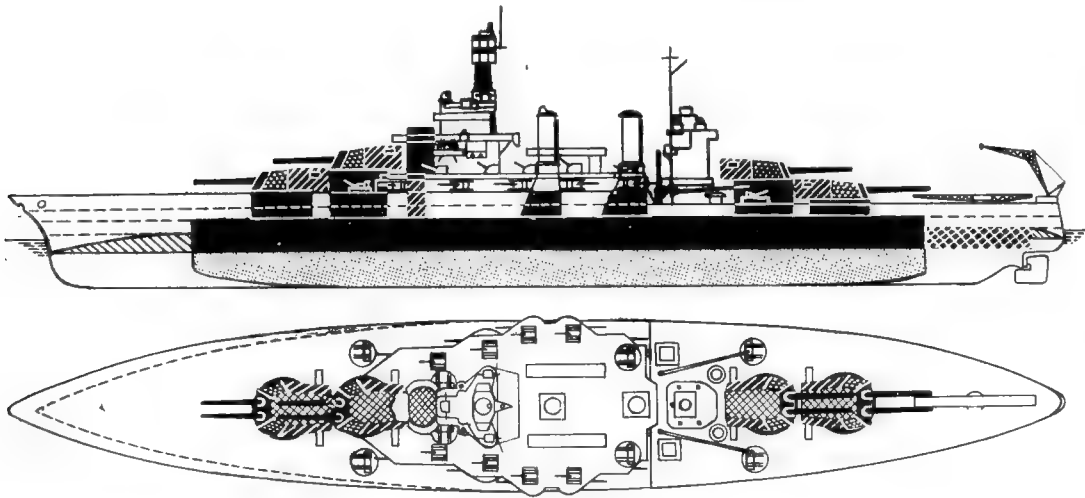
WEST VIRGINIA

2 "Colorado" Class.

COLORADO

MARYLAND

Displacement: Colorado, 32,500 tons standard (40,396 tons full load), Maryland, 31,500 tons (39,100 tons full load); West Virginia, 31,800 tons (40,354 tons full load)  
Dimensions: Length: 600 (w.l.), 624 (o.a.) feet. Beam: 108 feet (West Virginia, 114 feet). Draught: 30½ 29½, 30 feet (mean), respectively; 34 feet (max.) (West Virginia 35½ feet)  
Guns: 8—16 inch, 45 cal. Mk. 1, 8—5 inch, 38 cal., 8—5 inch, 51 cal. (West Virginia, 16—5 inch, 38 cal.), 32—40 mm. (West Virginia 40) and 50—20 mm. AA  
Aircraft: 3  
Catapults: 1 on quarter deck  
Armour: 16"–14" belt, 8" belt (aft), 3" deck (ends), 16"–9" funnel bases 18"–9" turrets, 16" conning tower and tube, 3½" upper and 2½" lower armour decks  
Machinery: Colorado, Westinghouse turbines and electric drive; Maryland and West Virginia, G.E. turbines and electric drive. 4 shafts. Designed S.H.P.: 29,500 (Colorado 32,000) = 20.5 kts. (see Engineering Notes)  
Boilers: 8 Babcock & Wilcox  
Oil fuel: 2,500 tons normal, 4,000 tons max. (unofficial figures)  
Complement: 2,100 (West Virginia as fleet flagship, 2,350)



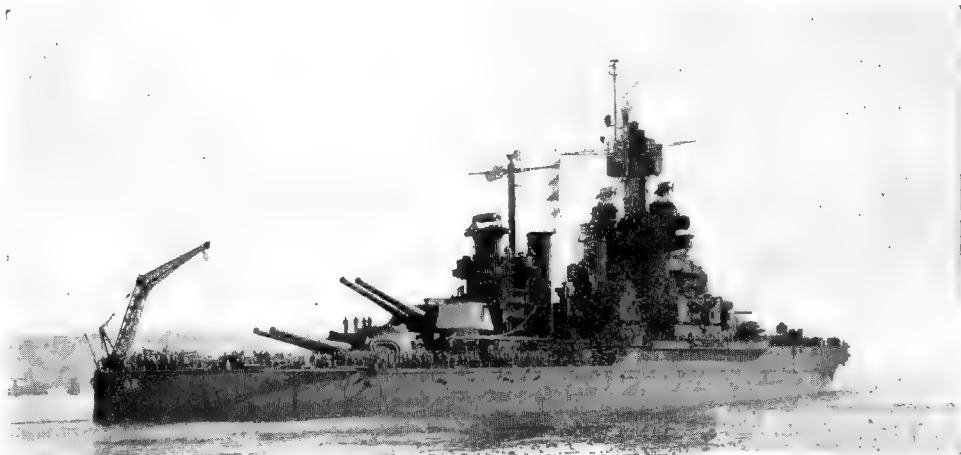
Note to Plan.—This represents Colorado and Maryland only. West Virginia is reconstructed as in photo.

General Notes.—Authorized 1916. West Virginia and Maryland both fitted as Flagships. West Virginia was reduced to a wreck by Japanese attack on Pearl Harbour on Dec. 7, 1941, being hit by four torpedoes and two heavy bombs. She settled down on an even keel, and has since been reconstructed to a silhouette identical in nearly all respects with California, including anti-torpedo bulge. Maryland received a considerable amount of bomb damage on same occasion. At that date, Colorado is understood to have been under refit. All out of commission, in Pacific Reserve Fleet at Bremerton, Wash.

Gunnery Notes.—Maximum elevation of 16-inch 30 degrees; maximum range at this elevation unofficially stated to be 33,300 yards. Turrets electrically manoeuvred and with electric hoists. Excepting increase of calibre to 16-inch, otherwise as notes for "Tennessee" class.

Anti-Torpedo Protection.—Ferrati type triple hull and minute internal subdivision by longitudinal and transverse unpierced bulkheads.

Engineering Notes.—On trials Colorado developed 37,480 S.H.P. = 20.67 kts., and Maryland 36,167 S.H.P. = 21.07 kts. West Virginia attained a speed of 21.1 kts. "Electric Drive" is identical with that for the "Tennessee" class, but in these ships electric installation has been extended. Part of steam generated in boilers is diverted for running six auxiliary turbo-generators, supplying current to anchor gear, workshop lathes, refrigerating plant, bakeries, etc. Guns are also electrically manoeuvred, ammunition hoists are electric. In fact every possible item of equipment is run by electric power. Estimated weight of machinery 2,002 tons. Heating surfaces as Tennessee on a later page.



MARYLAND.

Added 1949, U.S. Navy, Official



WEST VIRGINIA

Added 1949, U.S. Navy, Official.

No.	Name	Builders	Machinery	Laid down	Launched	Completed
BB 45	Colorado	New York S.B. Corpn.	Westinghouse Co.	May 1919	22 Mar. 1921	Aug. 1923
46	Maryland	Newport News	General Electric Co	Apr. 1917	20 Mar. 1920	July 1921
48	West Virginia	Newport News	General Electric Co	Apr. 1920	19 Nov. 1921	Dec. 1923

U.S.A.—Battleships (BB)

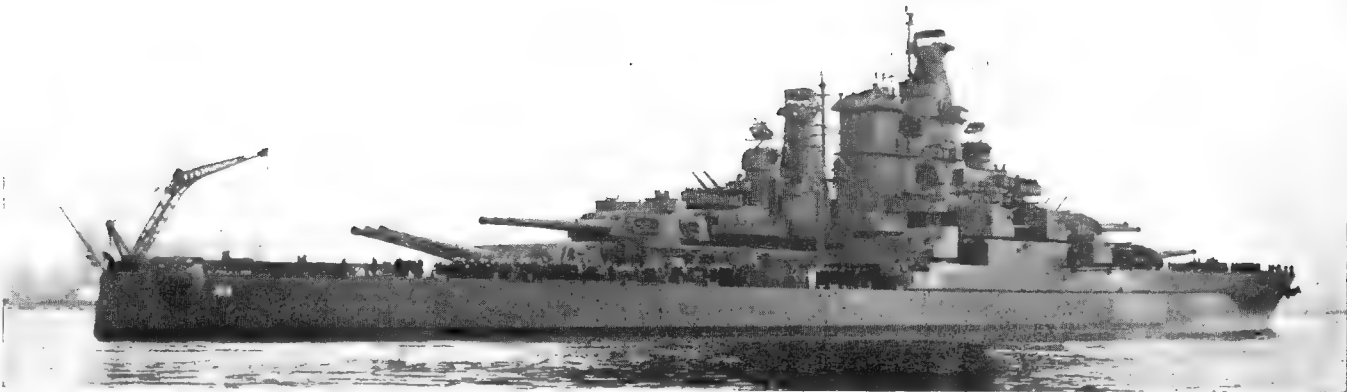
Battleships (BB)—continued.

2 “Tennessee” Class.

CALIFORNIA

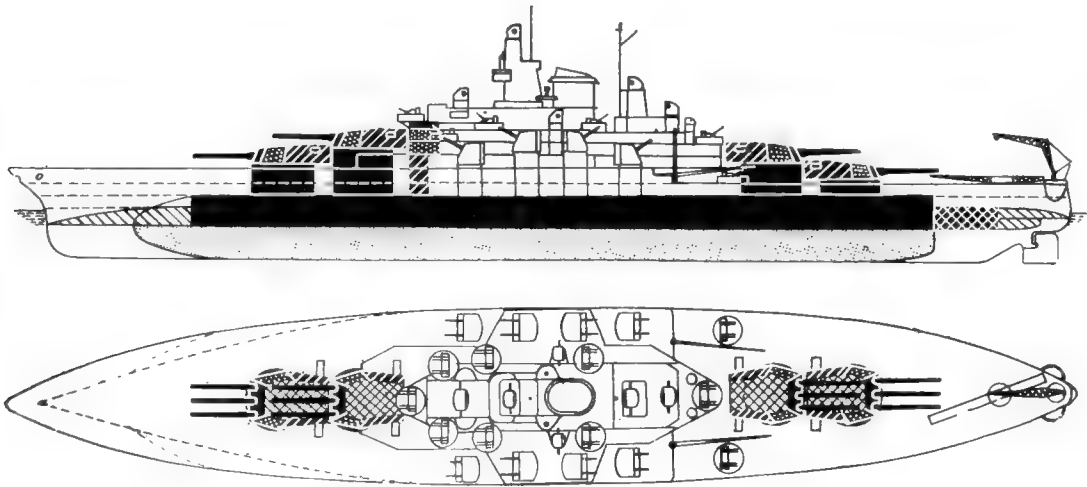
TENNESSEE

Displacement: 32,600 and 32,300 tons *standard* respectively (40,354 tons *full load*)  
Dimensions: Length: 600 (w.l.), 624 (o.a.) feet. Beam: 114 feet (*extreme*). Draught: 30½, 30½ (mean) feet, respectively; 35½, 35 (max.) feet, respectively  
Guns: 12—14 inch, 50 cal., Mk. IV, 16—5 inch, 38 cal., 40—40 mm. and 42 to 50—20 mm. AA.  
Aircraft: 4 and 3, respectively  
Catapults: 1 on quarter deck  
Armour: 14” belt, 8” belt (aft), 3” deck (ends), 15”–9” funnel bases, 18”–9” turrets, 16” conning tower and tube, 3½” upper and 2½” lower armour decks  
Machinery: *California*, G.E. turbines and electric drive; *Tennessee*, Westinghouse turbines and electric drive, 4 shafts in both ships. Designed H.P.: 30,000 = 20.5 kts.  
Boilers: 8 Bureau Express type in *California*, 8 Babcock & Wilcox in *Tennessee*  
Fuel (oil only): 2,200 tons *normal*, 4,906 and 4,893 tons *max.*, respectively.  
Complement: 1,808 (peace). 2,200 (war)



TENNESSEE.

Added 1949, U.S. Navy, Official.



**General Notes.**—Authorized 1915. The above design is practically identical with *New Mexico* class as originally completed. *California* fitted as Flagship. She was heavily damaged at Pearl Harbour on Dec. 7, 1941. Having been torpedoed and set on fire, she had to be flooded to save the magazines exploding, and settled down with a pronounced list. She has since been completely reconstructed, with the addition of bulges. *Tennessee* received extensive damage of a less serious nature from bombs on same occasion and has undergone similar transformation. Both out of commission, in Reserve Fleets.

**Gunnery Notes.**—The 14-inch are mounted in separate sleeves; elevation, up to 30 degrees. Maximum range stated to be over 35,000 yards. *Tennessee* had new main fire-control system installed and splinter screens added during 1940–41.

**Armour Notes.**—Internal subdivision by unpierced bulkheads developed to the utmost degree below waterline.

**Engineering Notes.**—Estimated weight of machinery: *California*, 1,805 tons; *Tennessee*, 2,045 tons. Heating surface: 50,984 sq. ft. for Bureau Express boilers in *California*; 41,768 sq. ft. + 4,168 sq. ft. (superheated) for Babcock boilers in *Tennessee*. Each boiler is in a separate w.t. compartment. Boiler rooms are abeam of engine rooms (4 to port, 4 to starboard), and boilers are under central control. Turbines are in tandem on centre line. On trials, *California* attained a speed of 21.46 kts. *Tennessee*, which developed 30,908 S.H.P. = 21.01 kts, was brought to rest from full speed within 3 minutes; tactical diameter: 700 yards (full helm, both screws turning forward)



CALIFORNIA.

Added 1949, U.S. Navy, Official.

No.	Name	Builders	Machinery	Laid down	Launched	Completed	Rebuilt
BB 44	California	Mare Island Yard	Gen. Electric Co.	Oct. 1916	20 Nov. 1919	15 Sept. 1921	1942
43	Tennessee	New York Yard	Westinghouse Co.	May 1917	30 Apr. 1919	16 Sept. 1920	1942



Large Cruisers (CB).

Large Tactical Command Ship (CBC).

2 + 1 "Alaska" Class.

ALASKA

Displacement:  
Dimensions:  
Guns:  
Aircraft:  
Catapults:  
Armour:  
Machinery:  
Boilers:  
Complement:

GUAM

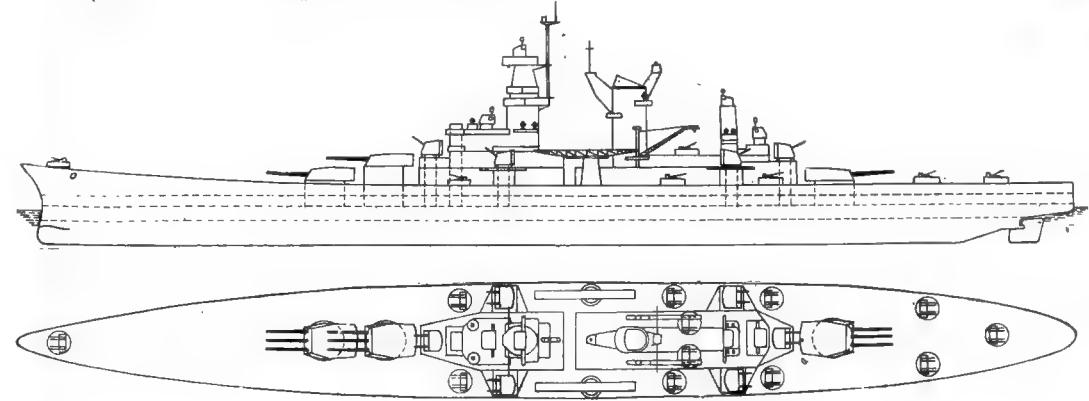
27,500 tons (34,250 tons full load)  
Length: 808½ (o.a.) feet. Beam: 91 feet. Draught: 31½ (max.) feet  
(Alaska and Guam) 9—12 inch, 50 cal., 12—5 inch, 38 cal., 56—40 mm. AA., 34—20 mm. AA.  
4  
2  
9"—5" side, 12½" turret faces, 5" turret sides and crowns, 4½"—3½" decks  
General Electric geared turbines. 4 shafts. S.H.P.: 150,000 = 33 kts. (30 kts. designed)  
8 Babcock & Wilcox  
1,370 (peace). 1,900 (war)

HAWAII



ALASKA.

Added 1951 U.S. Navy Official



Note to Plan.—Stern is actually of more rectangular form than shown here.

General Notes.—#11 ordered in Sept., 1940, and officially described as "Large Cruisers." In fact, they were the first vessels with the characteristics of battle cruisers to be ordered by any Navy since the Washington Conference met in 1921; and although they have cruiser lines their length and displacement exceed those of many battleships. Guam proved her worth in nearly six months of Pacific operations. Made her debut on March 18, 1945, in the historic carrier attack against the Ryukyus and steamed for 61 consecutive days. Alaska and Guam are at Naval Shipyard Annex at Bayonne as part of the inactivated Reserve Fleet. Inclusive cost is officially estimated at \$74,066,000 per ship. Three more ships of this type, Philippines, Puerto Rico and Samoa, authorised in 1940, were cancelled on June 24, 1943. Construction of Hawaii was held up awaiting final decision concerning armament, which it had been proposed to modify by fitting rocket projectors, and ship was laid up in naval shipyard 82 per cent. complete. After work was suspended, it is officially stated, there was discussion that she might be completed as a guided missile ship.

Gunnery Notes.—The 12-inch guns are of a new and powerful model. Anti-aircraft batteries very efficient.

Armour Notes.—Protection generally is on the lines of an armoured cruiser rather than of a battleship. Officially stated that their compartmentation makes them some of the most combat-worthy ships in the world.

No.	Name	Builders	Machinery	Laid down	Launched	Completed
CB 1	Alaska	New York Shipbuilding Corpn.	Gen. Electric Co.	16 Dec. 1941	15 Aug. 1943	17 June 1944
CB 2	Guam			2 Feb. 1942	21 Nov. 1943	17 Sept. 1944
CBC 1	Hawaii			20 Dec. 1943	11 Mar. 1945	

Note.—The classification of Hawaii was in 1952 changed from CB 3 to CBC 1 and she is being completed as a Large Tactical Command ship. The conversion includes the installation of a great deal of radar, communications, and headquarters equipment to fit her for being an operations command ship and she will act as such for a carrier task force or similar large fleet or group of ships. The largest guns mounted will be of 5 inch calibre.



GUAM.

Added 1949, U.S. Navy, Official.



ALASKA.

Added 1949, U.S. Navy, Official.

U.S.A.—Tactical Command Ship (Modified Heavy Cruiser)

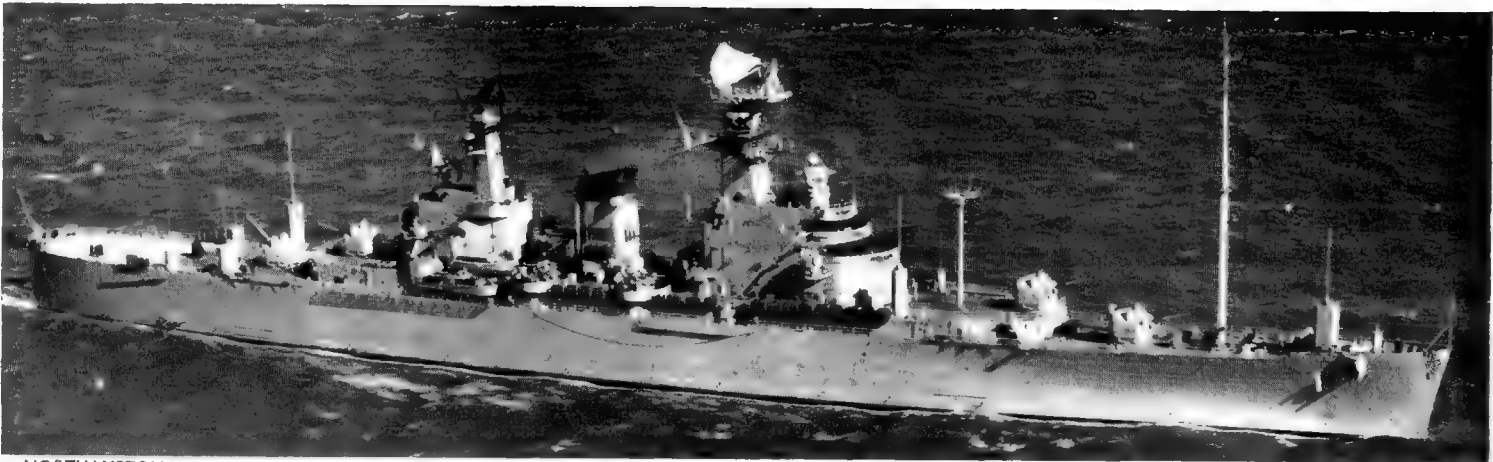
Tactical Command Ship (CLC).

Formerly rated as *Cruiser, Task Fleet Command Ship*.

I “Northampton” Type.

NORTHAMPTON

Builders : Bethlehem Co., Quincy, Mass.  
Laid down : 31 Aug. 1944  
Launched : 27 Jan. 1951  
Completed : 7 Mar. 1953



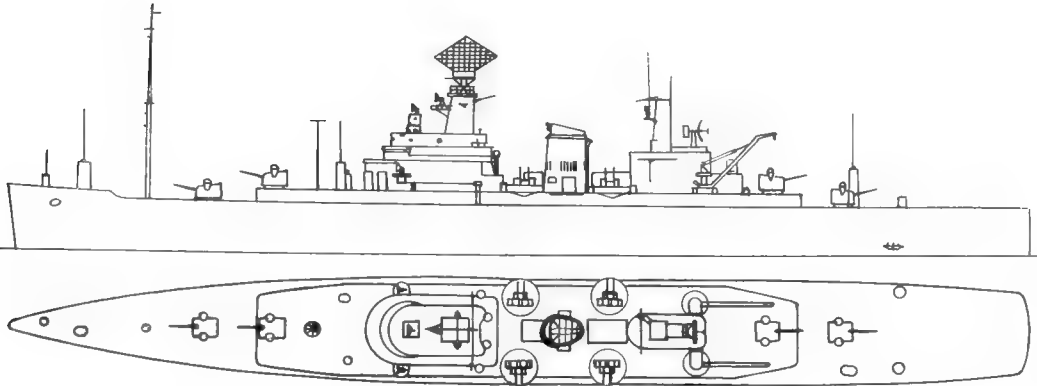
NORTHAMPTON.

1954, U.S. Navy, Official.

Displacement: 17,200 tons standard  
Dimensions : Length : 676 (o.a.) feet. Beam : 71 feet. Draught : 29 (max.) feet  
Guns : 4—5 inch, 54 cal. as main armament, 8—3 inch heavy AA. (see Gunnery Notes)  
Aircraft : 2 helicopters  
Armour : 6" side, 3" + 2" decks  
Machinery : General Electric geared turbines, 4 shafts. S.H.P. : 120,000 = 33 kts.  
Boilers : 4 Babcock & Wilcox  
Oil fuel : 2,500 tons  
Complement : 1,675

General Notes.—This vessel was originally designed as a heavy cruiser of the “Baltimore” class and was to have been complete as one of the modified “Oregon City” class numbered CA 125. She was 57 per cent. constructed as such when she was cancelled August 11, 1945. She was re-ordered July 1, 1948, and re-designed as a Task Force (now Tactical) Command Ship with the new rating of CLC 1. Accommodation and equipment have been modified accordingly. She is fully air-conditioned with an installation at least as extensive as that of the largest heavy cruiser *Salem* to which she now approximates in displacement. She was commissioned on 7 Mar., 1953, to fulfil the same functions as an AGC, i.e., as Operations-Communications-Headquarters Ship, but has more speed manoeuvrability, armament, and anti-aircraft fire than an AGC. Reported to have been designed to resist atomic attack. Has an imposing array of electronic antennae.

Gunnery Notes.—The main armament comprises four 5-inch dual purpose guns of a new model disposed in single turrets, two forward and two aft, “B” and “X” superfiring over “A” and “Y” respectively. The anti-aircraft battery includes eight 3-inch weapons, also of a new pattern, disposed in twin turrets, two on each side amidships abreast the funnel.



Note to Drawing.—Plan and elevation of *Northampton* drawn 1954 to a scale of 128 feet = 1 inch.



NORTHAMPTON.

1953, U.S. Navy, Official.

Heavy Cruisers (CA).

3 "Des Moines" Class.

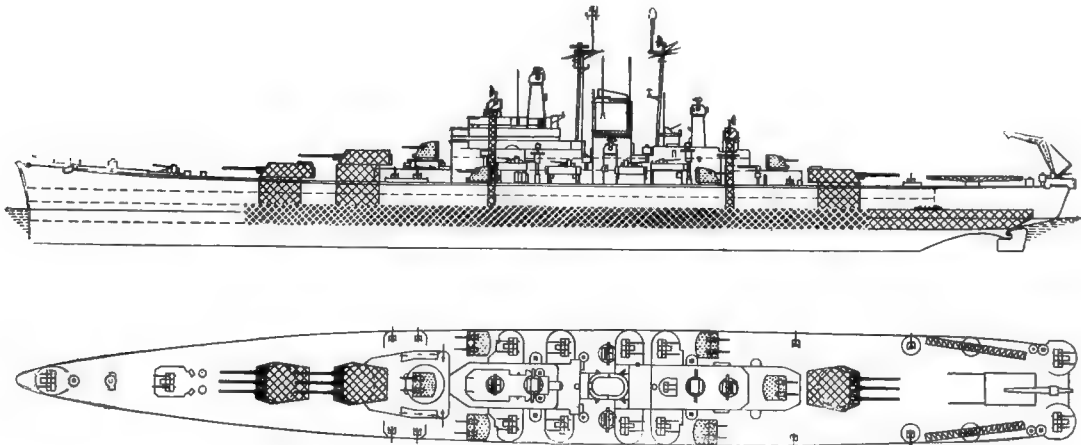
DES MOINES                      NEWPORT NEWS                      SALEM

Displacement : 17,000 tons (21,500 tons full load)  
Dimensions : Length : 716½ (o.a.) feet. Beam : 75½ feet.  
                         Draught : 26 (max.) feet  
Guns : 9—8 inch, 55 cal., triple turrets,  
                         12—5 inch, 38 cal., d.p., twin mounts, 24—3 inch AA., 50 cal.  
Aircraft : 1 helicopter  
Armour : 8"—6" side, 3" ± 2" decks  
Machinery : Geared turbines. 4 shafts. S.H.P. : 120,000 = 33 kts.  
Boilers : 4 Babcock & Wilcox  
Fuel : 2,600 tons  
Complement : 1,860 (war)



DES MOINES.

Added 1954, U.S. Navy, Official



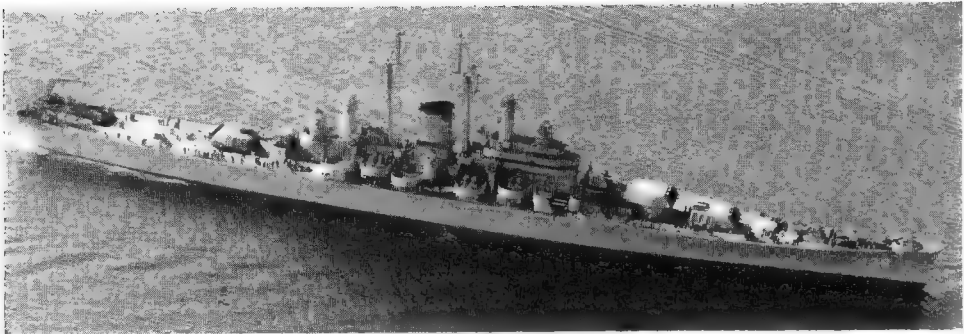
Note to Plan.—Catapults now discarded, seaplane units having been disbanded.

General Notes.—The heaviest cruisers in the world, and the first vessels to mount completely automatic rapid-fire 8-inch guns, these ships represent an expansion of Oregon City design. Much of extra tonnage is absorbed by rapid loading gear and extra magazine space, though part of this is made up by saving in complement. Newport News is completely air-conditioned and similar equipment will be installed in the Salem. The Des Moines is not air-conditioned. All assigned to Atlantic Fleet.

Gunnery Notes.—All guns are of fully automatic type. Cartridge cases have replaced wrapped charges and shells have automatic fuse setting. 8-inch guns are said to be capable of firing four times more rapidly than any previous model. The 24—3 inch AA guns are in 12 twin mountings : 2 twin mountings abreast funnel in peacetime.

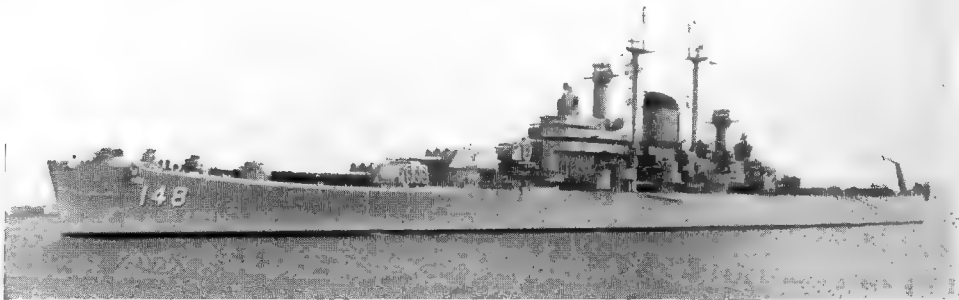
Appearance Note.—As completed have single funnels, thus resembling "Oregon City" class in appearance.

No.	Name	Builders and Machinery	Laid down	Launched	Completed
CA 134	Des Moines	Bethlehem Steel Co., Quincy	28 May 1945	27 Sept. 1946	17 Nov. 1948
139	Salem	Bethlehem Steel Co., Quincy	4 June 1945	25 Mar. 1947	9 May 1949
148	Newport News	Newport News Co.	1 Oct. 1945	6 Mar. 1947	29 Jan. 1949



SALEM.

1950, U.S. Navy Official



NEWPORT NEWS.

1949, U.S. Navy, Official

U.S.A.—Heavy Cruisers (CA)

Heavy Cruisers (CA).

3 “Oregon City” Class.

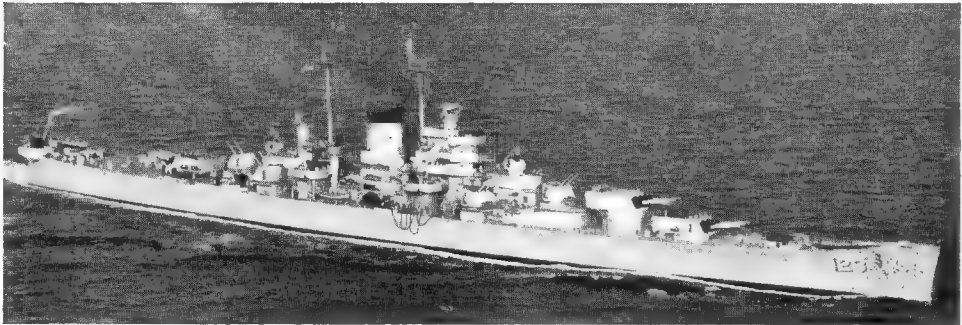
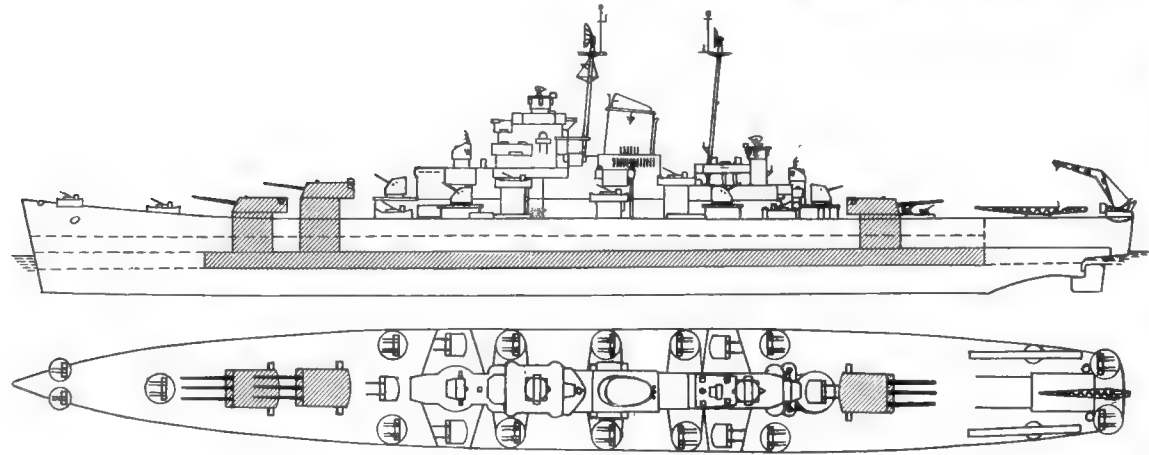
ALBANY                      OREGON CITY                      ROCHESTER

Displacement : 13,700 tons, Rochester 13,000 tons standard (17,500 tons full load)  
Dimensions : Length : 673½ (o.a.) feet. Beam : 71 feet.  
                     Draught : 26 (max.) feet  
Guns : Oregon City : 9—8 inch, 55 cal., 12—5 inch, 38 cal.,  
                     52—40 mm. AA., 24—20 mm. AA.  
                     Albany, Rochester : 9—8 inch, 12—5 inch, 38 cal.,  
                     20—3 inch, 50 cal. AA.  
Aircraft : 1 helicopter  
Armour : 6” side, 3” + 2” decks  
Machinery : General Electric geared turbines. 4 shafts.  
                     S.H.P. : 120,000 = 33 kts.  
Boilers : 4 Babcock & Wilcox  
Fuel : 2,500 tons  
Complement : 1,700 (war)



OREGON CITY.

Added 1954, U.S. Navy, Official.



ALBANY.

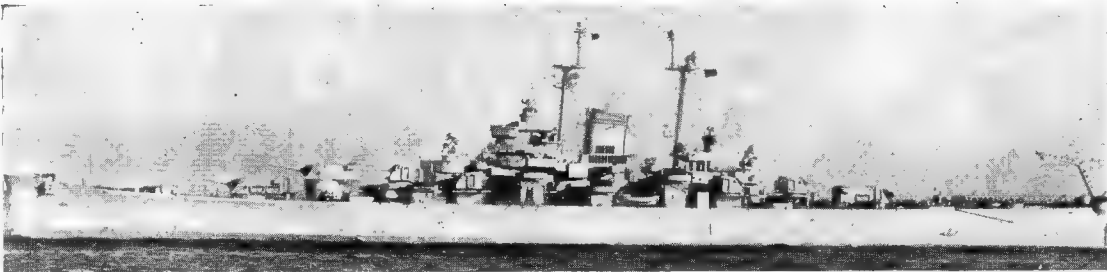
1952 Skyfotos.

Note to Plan.—Represents Oregon City. Catapults now discarded in Albany and Rochester, which have twin 3-inch, 750 cal. on starboard quarter only. Armour does not cover the 8-inch magazines (on the side only).

General Notes.—These ships are modified Baltimores, with a single funnel and simplified superstructure. Bridge is further aft than in Baltimore class. Oregon City, out of commission, in reserve, retains original armament. Active units rearmed with 3 inch guns in place of 40 mm. and 20 mm.

Engineering Notes.—Cruising turbines are not included in engine design. In event of port or starboard fuel tanks being ruptured, change-over of suction to other side could be accomplished in a minute, oil burner lines being divided at boiler face.

No.	Name	Builders and Machinery	Laid down	Launched	Completed
CA 122	Oregon City	Bethlehem Steel Co., Quincy	8 Apr. 1944	9 Apr. 1945	16 Feb. 1946
123	Albany		6 Mar. 1944	30 June 1945	15 June 1946
124	Rochester		29 May 1944	28 Aug. 1945	20 Dec. 1946



ROCHESTER.

Added 1954, U.S. Navy, Official.

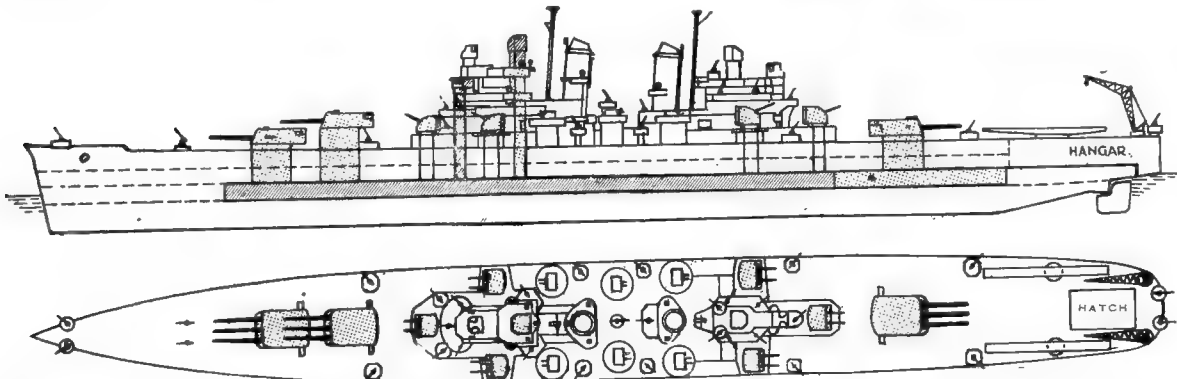


14 "Baltimore" Class.

**BALTIMORE**  
**G BOSTON**  
**BREMERTON**  
**G CANBERRA** (ex-Pittsburgh)  
**CHICAGO**  
**COLUMBUS**  
**FALL RIVER**

**HELENA** (ex-Des Moines)  
**G LOS ANGELES**  
**MACON**  
**PITTSBURGH** (ex-Albany)  
**QUINCY** (ex-St. Paul)  
**ST. PAUL** (ex-Rochester)  
**TOLEDO**

Displacement : 13,600 tons standard (17,200 tons full load)  
Dimensions : Length: 673½ (o.a.) feet. Beam: 71 feet. Draught: 26 (max.) feet  
Guns : 9—8 inch 55 cal., 12—5 inch, 38 cal., 52—40 mm. AA.,  
(2)—3 inch 50 cal. guns replace 40 mm. in active units  
Aircraft : All ships carry a helicopter  
Armour : 6" side, 3" + 2" decks  
Machinery : General Electric geared turbines. 4 shafts. S.H.P. :  
120,000 = 34 kts.  
Boilers : 4 Babcock & Wilcox  
Fuel : 2,500 tons  
Complement : 1,700 (war)



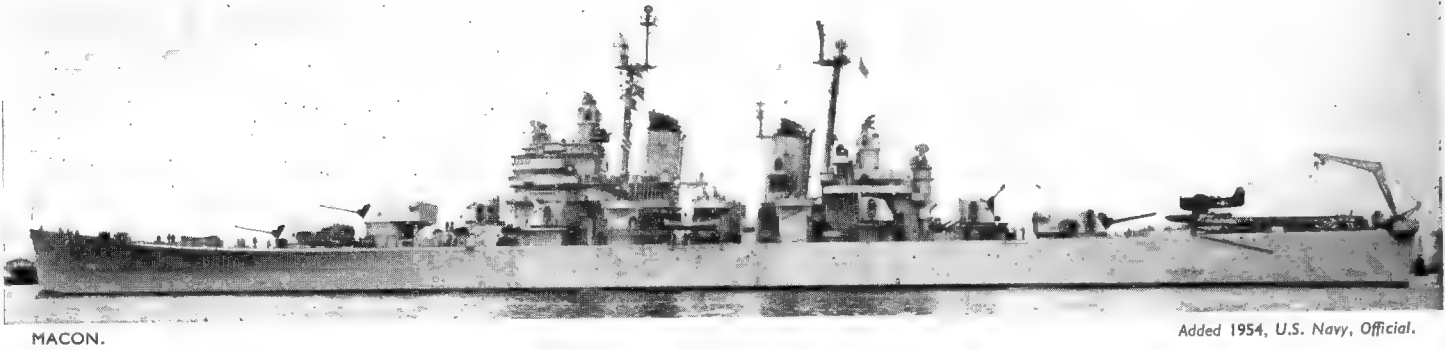
Note to Plan.—Only one crane now at stern except *Baltimore*, *Boston*, *Canberra* and *Quincy* which have two cranes on stern as shown. Catapults discarded. Active units have twin 3 inch, 50 cal. guns on starboard quarter only.

General Notes.—*Boston* was built in two years. Are much enlarged and improved editions of *Wichita*. Last 6 ships belong to War Programme. *Canberra* was named in commemoration of H.M.A.S. *Canberra*, sunk in 1st Battle of Savo Island, Aug. 9, 1943.

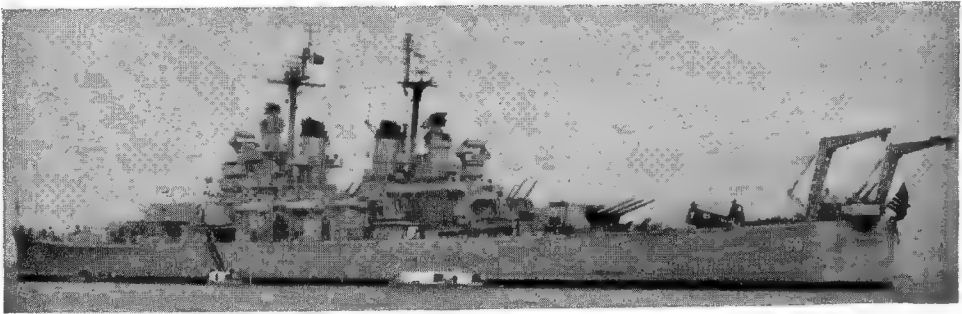
Gunnery Note.—8-inch guns are a new model, firing a heavier shell than those mounted in earlier cruisers. *Bremerton*, *Columbus*, *Helena*, *Los Angeles*, *St. Paul* and *Toledo* have undergone armament conversion (improved rapid-firing 3-inch 50 cal. AA. guns replacing 40 mm. AA. guns.

Guided Missile Notes.—*Boston* and *Canberra* are being converted to guided missile ships (CAG), by N.Y. Shipbuilding Corp. Camden, N.Y., at cost of \$30,000,000 for both. To be fitted with "Terrier" missile installations. To complete 1955. After gun turrets replaced by 2 missile launching platforms. *Los Angeles* to be converted to guided missile ship at Mare Island Naval Shipyard during 3 months of 1954 with no change in present armament.

No.	Name	Builders	Laid down	Launched	Completed
CA 68	Baltimore	Bethlehem Steel Co., Quincy	26 May 1941	28 July 1942	15 Apr. 1943
CAG 1 (ex-CA 69)	Boston		30 June 1941	26 Aug. 1942	30 June 1943
CAG 2 (ex-CA 70)	Canberra		3 Sept. 1941	19 Apr. 1943	14 Oct. 1943
CA 71	Quincy		9 Oct. 1941	23 June 1943	15 Dec. 1943
CA 72	Pittsburgh		3 Feb. 1943	22 Feb. 1944	10 Oct. 1944
CA 73	St. Paul		3 Feb. 1943	16 Sep. 1944	17 Feb. 1945
CA 74	Columbus		28 June 1943	30 Nov. 1944	8 June 1945
CA 75	Helena		9 Sep. 1943	28 Apr. 1945	4 Sep. 1945
CA 130	Bremerton	New York S.B. Corp.	1 Feb. 1943	2 July 1944	29 Apr. 1945
CA 131	Fall River		12 Apr. 1943	13 Aug. 1944	1 July 1945
CA 132	Macon		14 June 1943	15 Oct. 1944	25 Aug. 1945
CA 133	Toledo		13 Sep. 1943	6 May 1945	27 Oct. 1946
CA 135	Los Angeles	Philadelphia Navy Yard	28 July 1943	20 Aug. 1944	22 July 1944
CA 136	Chicago		28 July 1943	20 Aug. 1944	10 Jan. 1945

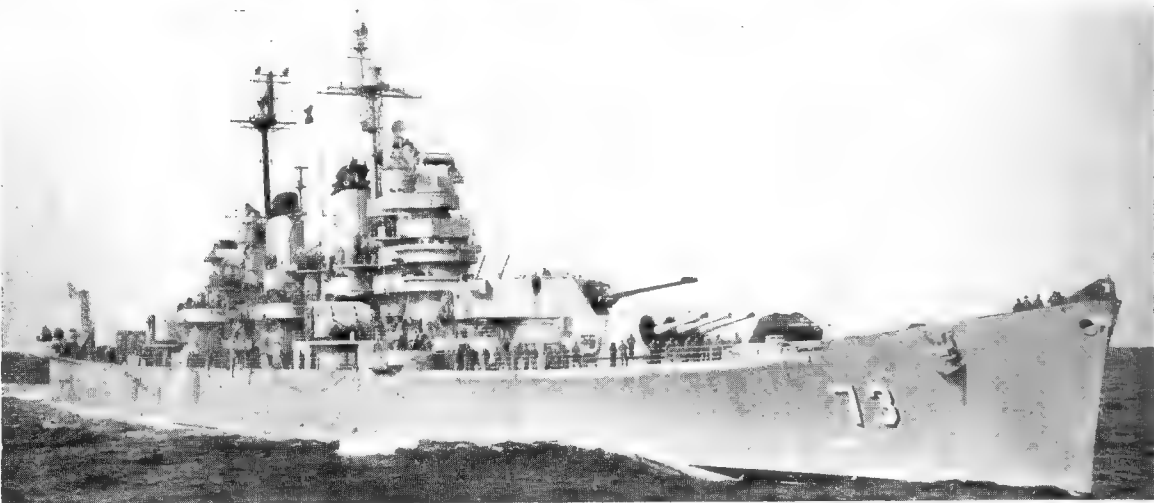


Added 1954, U.S. Navy, Official.



BALTIMORE.

1954, Wright & Logan.



ST. PAUL.

1953, U.S. Navy, Official.

Macon - Visted Buffalo - 7/26/59



## U.S.A.—Heavy Cruisers (CA)

### Heavy Cruiser (CA).



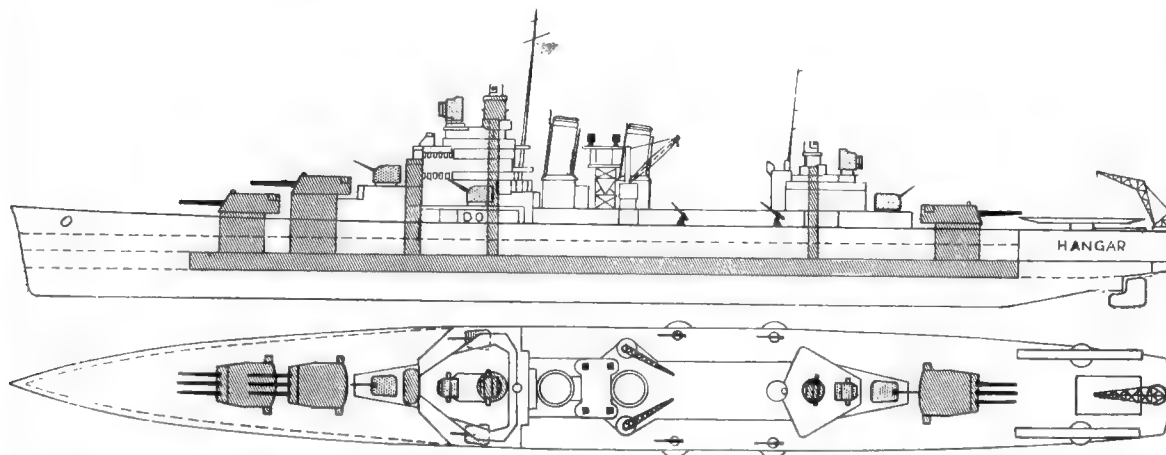
WICHITA.

Added 1950, U.S. Navy, Official.

#### WICHITA

Builders : Philadelphia Navy Yard  
Engineers : Westinghouse Co.  
Laid down : 28 Oct. 1935  
Launched : 16 Nov. 1937  
Completed : 16 Feb. 1939

Displacement : 10,000 tons standard (13,700 tons full load)  
Dimensions : Length : 600 (w.l.), 614 (o.a.) feet. Beam : 61½ feet. Draught : 19½ (mean), 25 max. feet  
Guns : 9—8 inch, 55 cal., 8—5 inch, 38 cal. (d.p.), 20—40 mm. AA., 14—20 mm. AA.  
Aircraft : 4  
Catapults : 2  
Armour : 5" side (amidships), 1½" side (fore and aft), 3" + 2" decks, 6"—5" turret faces, 3" turret sides and backs, 8" C.T.  
Machinery : Westinghouse geared turbines. 4 shafts. S.H.P. : 100,000 = 32.5 kts.  
Boilers : 8 Babcock & Wilcox  
Fuel : 1,650 tons  
Complement : 882 (peace), 1,200 (war)



General Notes.—No. CA 45. Ordered 22 Aug. 1934. Though originally to have been a unit of "New Orleans" class, this ship was completed as a modified Brooklyn with 8-inch guns, thus becoming the eighteenth heavy cruiser built under Treaty limitations. Out of commission, in reserve.

Appearance Notes.—Half-cased funnels, set close together. Single gun houses above "B" and "Y" turrets and abreast bridge wing. The four 5 inch guns mounted in the waist are protected by splinter screens.

## Heavy Cruisers (CA)

### I "Portland" Class.



PORTLAND.

Added 1954, U.S. Navy, Official.

#### PORTLAND

Builders : Bethlehem Steel Co., Quincy.  
Laid down : 17 Feb. 1930  
Launched : 21 May 1932  
Completed : 23 Feb. 1933

Displacement : 9,800 tons standard (13,000 tons full load)  
Dimensions : Length : 582 (w.l.), 610½ (o.a.) feet. Beam : 66½ feet. Draught : 17½ (mean), 24 (max.) feet  
Guns : 9—8 inch, 55 cal.; 8—5 inch AA., 25 cal.; 24—40 mm. AA., 16—20 mm. AA.  
Armour : 4"—3" vert. side; 3"—1½" turrets; 2" + 2" decks  
Machinery : Parsons geared turbines. 4 shafts. S.H.P. : 107,000 = 32.7 kts.  
Boilers : 8 Yarrow  
Oil fuel : 1,600 tons  
Complement : 876 (peace), 1,200 (war)

Notes.—No. CA 33. Placed at the disposal list after the Second World War, but restored to the Navy List in 1952 (see notes under "Chester" class below.)

### 3 "Chester" Class.



CHESTER.

Added 1953, U.S. Navy, Official.

#### AUGUSTA

Displacement : 9,050 tons standard (Chester 9,200 tons), 12,000 tons full load  
Dimensions : Length : 569 (w.l.), 600½ (o.a.) feet. Beam : 66½ feet. Draught : 16½ (mean), 23 (max.) feet  
(Chester 570 (w.l.), 16½ (mean) feet)

Guns : 9—8 inch, 55 cal.; 8—5 inch AA., 25 cal.; 32—40 mm. AA., 27—20 mm. AA.  
Armour : 3" vert. side; 1½" gunhouses; 2" + 1" decks  
Machinery : Parsons geared turbines. 4 shafts. Designed S.H.P. : 107,000 32.7 kts.  
Boilers : 8 White Forster  
Oil fuel : 1,500 tons  
Radius : 13,000 miles at 15 kts.  
Complement : 872 (peace), 1,200 (war)

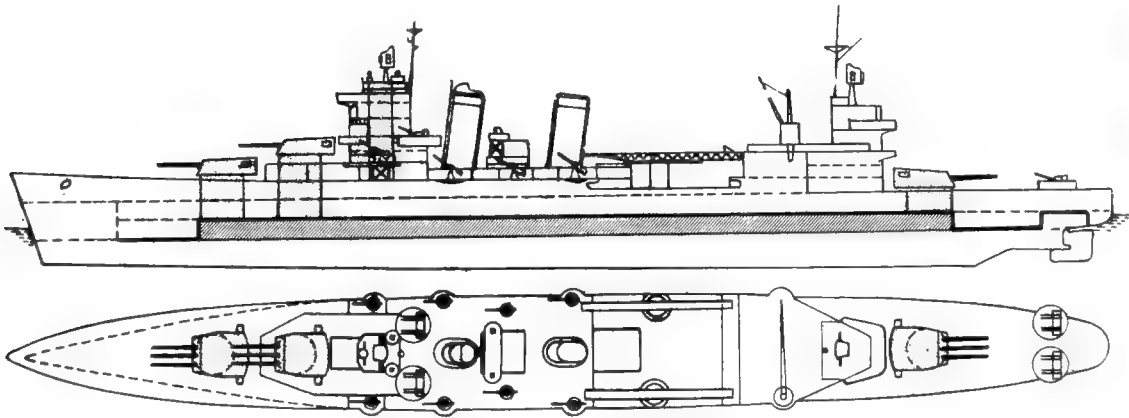
Notes.—These three ships were placed on the supernumerary list with Portland (see above) after the Second World War pending a decision as to their disposal, but in 1952 they were included in the list of naval vessels in the Atlantic Reserve Fleet and no longer in the list of ships to be disposed of.

No.	Name	Builders	Laid down	Launched	Completed
CA 31	Augusta	Newport News, Co.	2 July 1929	1 Feb. 1930	30 Jan. 1931
CA 27	Chester	New York S.B. Corp.	6 Mar. 1928	3 July 1929	24 June 1930
CA 28	Louisville	Puget Sound Navy Yard	4 July 1928	1 Sep. 1930	15 Jan. 1931

Heavy Cruisers (CA).

“ New Orleans ” Class.

NEW ORLEANS	MINNEAPOLIS	TUSCALOOSA	SAN FRANCISCO
Displacement :	9,950 tons, except <i>Tuscaloosa</i> , 9,975 tons (13,500 tons full load), <i>New Orleans</i> 13,100 tons full load)		
Dimensions :	Length : 574 (w.l.), 588 (o.a.) feet. Beam : 61½ feet. Draught : 19½ (mean), 25 (max.) feet		
Guns :	9—8 inch, 55 cal., 8—5 inch AA., 25 cal., 24—40 mm. AA., 19—20 mm. AA.		
Aircraft :	4		
Catapults :	2		
Armour :	1½" side (fore and aft), 5" side (amidships between sections 10-17), 3" + 2" decks, 5"—6" turret faces, 3" turret sides and backs, 8" conning tower		
Machinery :	Parsons geared turbines in <i>Tuscaloosa</i> ; Westinghouse in others. 4 shafts. S.H.P. : 107,000 = 32.7 kts.		
Boilers :	8 Babcock & Wilcox		
Fuel :	1,650 tons		
Complement :	876 (peace), 1,200 (war)		



General Notes.—In this class the utmost economy has been effected in construction, electric welding having been employed extensively and weight saved in every direction even to the extent of using aluminium paint internally. There is a certain amount of plating on the bridgework, not shown in the plan. All out of commission in reserve.

Gunnery Notes.—8 inch guns elevate to 45 degrees. Anti-aircraft armament augmented in 1940-41.



NEW ORLEANS.

Added 1950, U.S. Navy, Official.



SAN FRANCISCO.

Added 1950, U.S. Navy, Official.

N <sub>o</sub>	Name	Builders	Machinery	Laid down	Launched	Completed
CA 32	<i>New Orleans</i>	New York Navy Yard	Westinghouse Co.	14 Mar. 1931	12 Apr. 1933	18 Apr. 1934
36	<i>Minneapolis</i>	Philadelphia Navy Yard	Westinghouse Co.	27 June 1931	6 Sep. 1933	20 June 1934
37	<i>Tuscaloosa</i>	New York S.B. Corp.	N.Y.S.B. Corp.	3 Sep. 1931	15 Nov. 1933	17 Aug. 1934
38	<i>San Francisco</i>	Mare Isl. Navy Yard	Westinghouse Co.	9 Sep. 1931	9 Mar. 1934	23 Apr. 1933

U.S.A.—Large Light Cruisers (CL)

Light Cruisers (CL).

2 “Worcester” Class.

ROANOKE

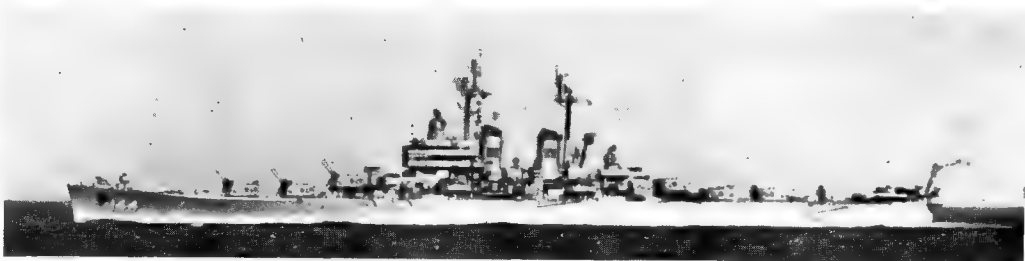
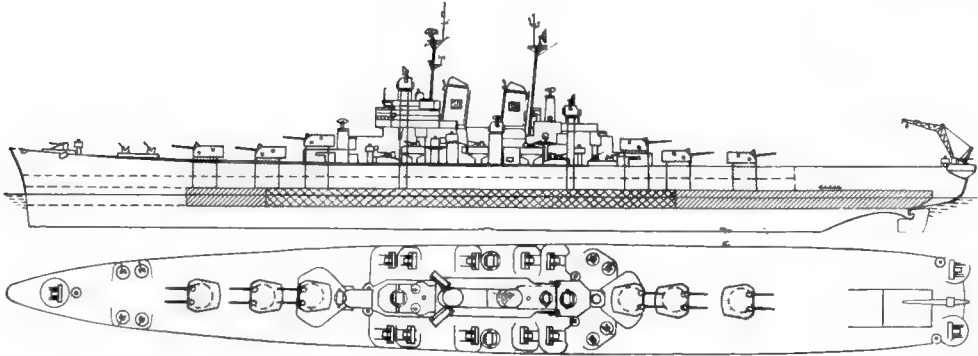
WORCESTER

Displacement : 14,700 tons (18,000 tons full load)  
Dimensions : Length : 668 (w.l.) 679½ (o.a.) feet. Beam : 70½ feet. Draught : 25 (max.) feet  
Guns : 12—6 inch, 47 cal., d.p. (semi-automatic),  
24—3 inch, 50 cal., d.p. (rapid fire)  
Aircraft : 1 helicopter  
Armour : 6” — 3” side, 4” turrets, 3”  
+ 2” decks  
Machinery : Geared turbines. 4 shafts. S.H.P. : 120,000  
= 32 kts.  
Boilers : 4 Babcock & Wilcox  
Oil fuel : 3,300 tons  
Complement : 973 (peace), 1,700 (war)



ROANOKE.

Added 1951, courtesy “Our Navy.”



WORCESTER.

1952, Lieut. Aldo Fraccaroli.

General Notes.—Both ordered June 15, 1943. *Roanoke* commissioned at Philadelphia Navy Yard. Both in Atlantic Fleet. These ships, which are larger than most heavy cruisers, are nevertheless rated as light cruisers by Treaty definitions. Two incomplete sister ships, *Vallejo* (146) and *Gary* (147), were cancelled on 11 Aug., 1945. Six additional ships, CL 154-159, were cancelled in 1945.

Gunnery Notes.—Have 6 inch guns of a new automatic model, arranged similarly to 5 inch in *Spokane*, and 3 inch in twin mounts of a new type.

No.	Name	Builders	Laid down	Launched	Completed
CL 145	Roanoke	New York S.B. Corp., Camden	15 May 1945	16 June 1947	4 Apr. 1948
144	Worcester		29 Jan. 1945	4 Feb. 1947	25 June 1948



WORCESTER.

1949 .U.S. Navy, Official.

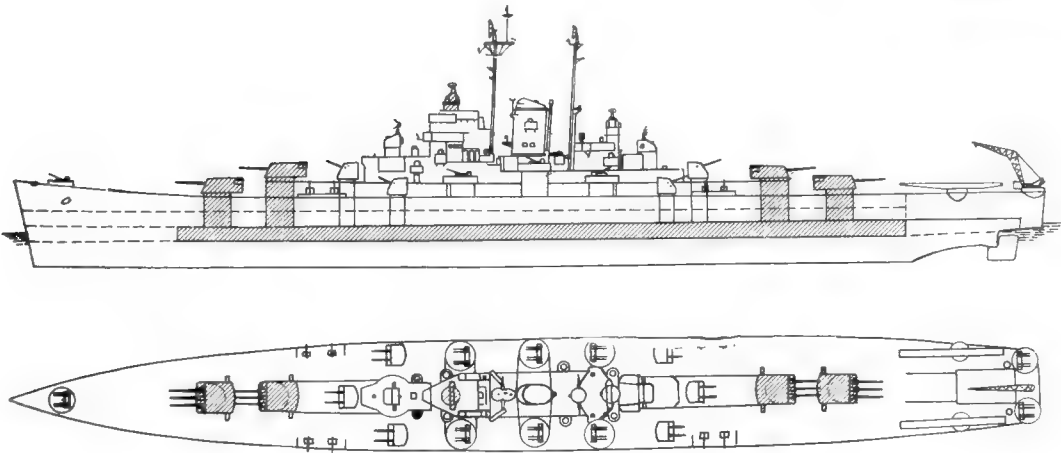
Light Cruisers (CL).

2 “ Fargo ” Class.

FARGO

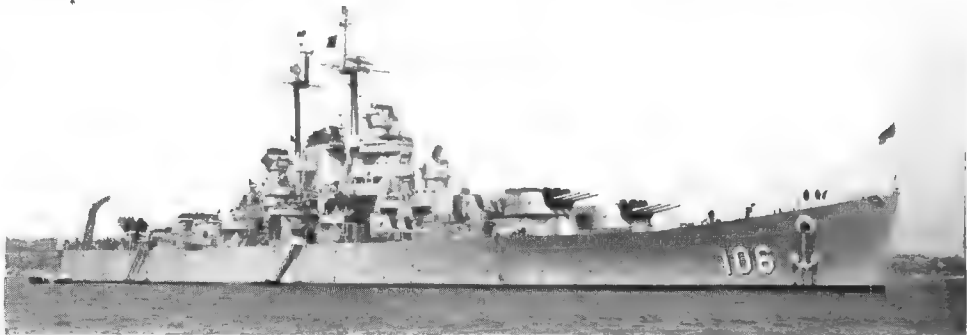
HUNTINGTON

Displacement : 10,000 tons (13,755 tons full load)  
Dimensions : Length : 600 (w.l.), 610 (o.a.) feet. Beam : 66 feet.  
                  Draught (at normal displacement) : 20 (mean), 25 (max.) feet  
Guns : 12—6 inch, 47 cal. 12—5 inch, 38 cal., d.p., 24—40 mm. AA., 19—20 mm. AA.  
Aircraft : 3 seaplanes  
Catapults : 2  
Armour : Similar to Cleveland class  
Machinery : General Electric geared turbines. 4 shafts. S.H.P. : 100,000 = 32.5 kts.  
Boilers : 4 Babcock & Wilcox  
Complement : 916 (peace), 1,200 (war)



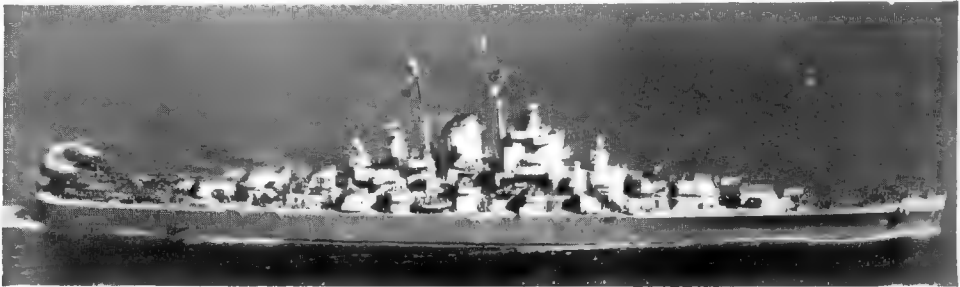
FARGO.

1954, U.S. Navy, Official.



FARGO.

Added 1949, Marius Bar.



HUNTINGTON.

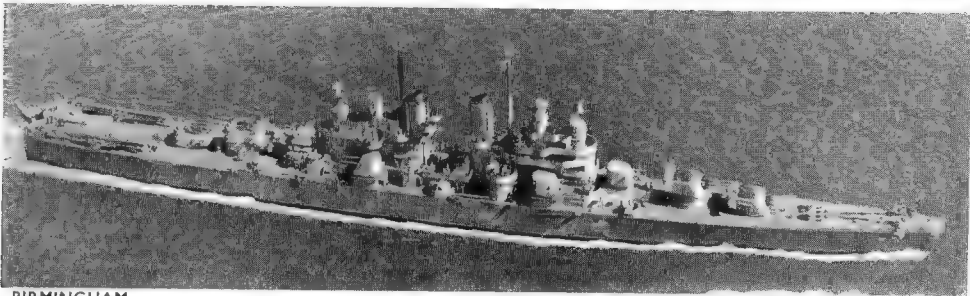
1946, U.S. Navy, Official.

Notes.—These two ships are modified *Clevelands*, with single funnels and simplified superstructures, intended to enlarge the area of fire of AA. armament. Out of commission, in reserve.

No.	Name	Builders	Laid down	Launched	Completed
106	<i>Fargo</i>	} New York S.B. Corpn.	23 Aug. 1943	25 Feb. 1945	9 Dec. 1945
107	<i>Huntington</i>		4 Oct. 1943	8 Apr. 1945	23 Feb. 1946

U.S.A.—Light Cruisers (CL)

27 "Cleveland" Class.



BIRMINGHAM.

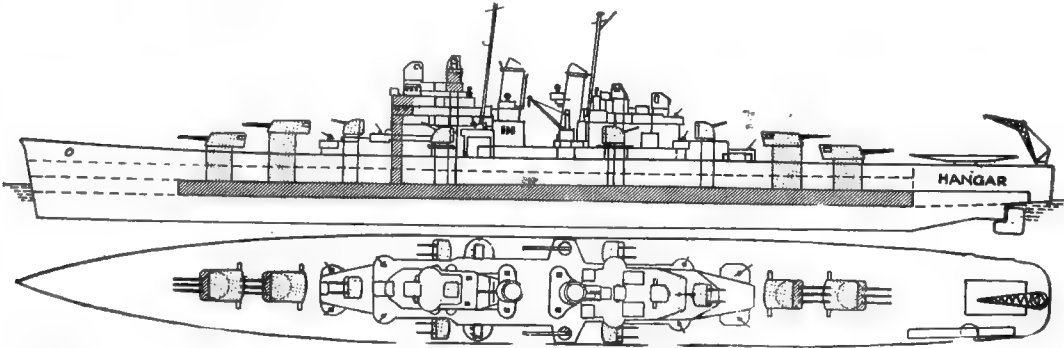
Added 1950, U.S. Navy, Official

AMSTERDAM  
ASTORIA (ex-Wilkes-Barre)  
ATLANTA  
BILOXI  
BIRMINGHAM  
CLEVELAND  
COLUMBIA  
DAYTON  
DENVER

DULUTH  
GALVESTON  
HOUSTON (ex-Vicksburg)  
LITTLE ROCK  
MANCHESTER  
MIAMI  
MOBILE  
MONTPELIER  
OKLAHOMA CITY

PASADENA  
PORTSMOUTH  
PROVIDENCE  
SANTA FE  
SPRINGFIELD  
TOPEKA  
VICKSBURG (ex-Cheyenne)  
VINCENNES (ex-Flint)  
WILKES-BARRE

Displacement: 10,000 tons (13,755 tons full load)  
Dimensions: Length: 600 (w.l.), 610 (o.a.) feet. Beam: 66 feet. Draught: 20 (mean), 25 (max.) feet  
Guns: 12—6 inch, 47 cal., 12—5 inch, 38 cal., (d.p.) paired, 24 to 28—40 mm. AA., 19—20 mm. AA.  
(Manchester 3-inch, 50 cal. automatic AA. in place of 40 mm. and 20 mm. mounts)  
Aircraft: 3 (Manchester carries a helicopter)  
Catapults: 1 or 2 (none in Manchester)  
Armour: 5"—1½" side, 3"—2" decks, 5"—3" gunhouses  
Machinery: General Electric geared turbines. 4 shafts. S.H.P. : 100,000 = 33 kts.  
Boilers: 4 Babcock & Wilcox  
Oil fuel: 2,000 tons  
Complement: 916 (peace), 1,200 (war)

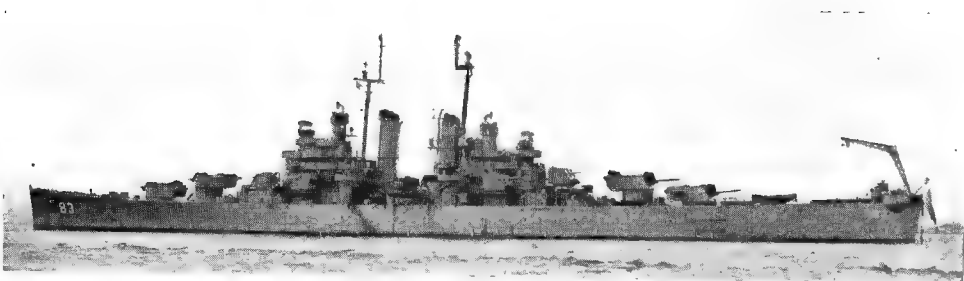


Note to Plan.—Cranes abreast of second funnel have been removed. Manchester has no catapult.

General Notes.—This is the largest group of cruisers of a single design ever put in hand. Nine originally ordered from New York S.B. Corp. were converted into aircraft carriers of the "Independence" class. Birmingham was torpedoed Nov. 8, 1943; again severely damaged when Princeton blew up alongside her in Oct., 1944; and nearly sunk by a Japanese suicide aircraft whose bomb penetrated three of her decks off Okinawa on May 4, 1945. The Houston was heavily damaged by a torpedo from a Japanese aircraft off Formosa in Oct., 1944.

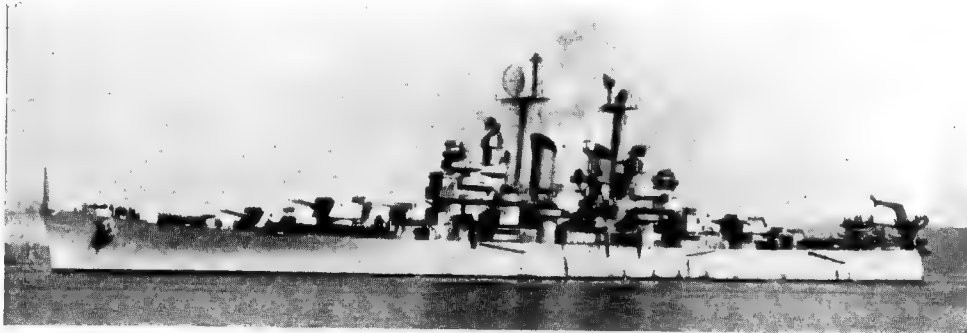
Gunnery Notes.—Manchester has undergone armament conversion. She mounts 3 inch guns in place of former 40 mm. and 20 mm., and is the only ship of the class in commission.

Appearance Notes.—First seven ships (CL 55-58, 60, 62, 63) have round bridge fronts as in above photo of Birmingham. Remaining 20 ships have rectangular pilot house with a walk around the front.



MANCHESTER

1949, Ted Stone.



WILKES-BARRE.

Added 1949, Abrahams.

No.	Name	Builders	Laid down	Launched	Completed
CL 55	Cleveland	New York S.B. Corp.	1 July 1940	1 Nov. 1941	15 June 1942
56	Columbia		19 Aug. 1940	17 Dec. 1941	29 June 1942
57	Montpelier		2 Dec. 1940	12 Feb. 1942	9 Sep. 1942
58	Denver		26 Dec. 1940	4 Apr. 1942	15 Oct. 1942
60	Santa Fe		7 June 1941	10 Jan. 1942	24 Nov. 1942
103	Wilkes-Barre		14 Dec. 1942	24 Dec. 1943	1 July 1944
104	Atlanta		25 Jan. 1943	6 Feb. 1944	3 Dec. 1944
105	Dayton		8 Mar. 1943	19 Mar. 1944	7 Jan. 1945
64	Vincennes	Bethlehem Co., Quincy	7 Mar. 1942	17 July 1943	21 Jan. 1944
65	Pasadena		6 Feb. 1943	28 Dec. 1943	8 June 1944
66	Springfield		13 Feb. 1943	9 Mar. 1944	8 Sep. 1944
67	Topeka		21 Apr. 1943	19 Aug. 1944	23 Dec. 1944
82	Providence		27 July 1943	28 Dec. 1944	15 May 1945
83	Manchester		25 Sep. 1944	5 Mar. 1946	29 Oct. 1946
89	Miami	Cramp S.B. Co.	2 Aug. 1941	8 Dec. 1942	28 Dec. 1943
90	Astoria		6 Sept. 1941	6 Mar. 1943	17 May 1944
91	Oklahoma City		8 Dec. 1942	20 Feb. 1944	22 Dec. 1944
92	Little Rock		6 Mar. 1943	27 Aug. 1944	17 June 1945
93	Galveston		20 Feb. 1944	22 Apr. 1945	25 May 1946
62	Birmingham	Newport News Co.	17 Feb. 1941	20 Mar. 1942	29 Jan. 1943
63	Mobile		14 Apr. 1941	15 May 1942	24 Mar. 1943
80	Biloxi		9 July 1941	23 Feb. 1943	31 Aug. 1943
81	Houston		4 Aug. 1941	14 June 1943	20 Dec. 1943
86	Vicksburg		26 Oct. 1942	14 Dec. 1943	12 June 1944
87	Duluth		9 Nov. 1942	13 Jan. 1944	18 Sep. 1944
101	Amsterdam		3 Mar. 1943	25 Apr. 1944	8 Jan. 1945
102	Portsmouth		28 June 1943	20 Sep. 1944	25 June 1945



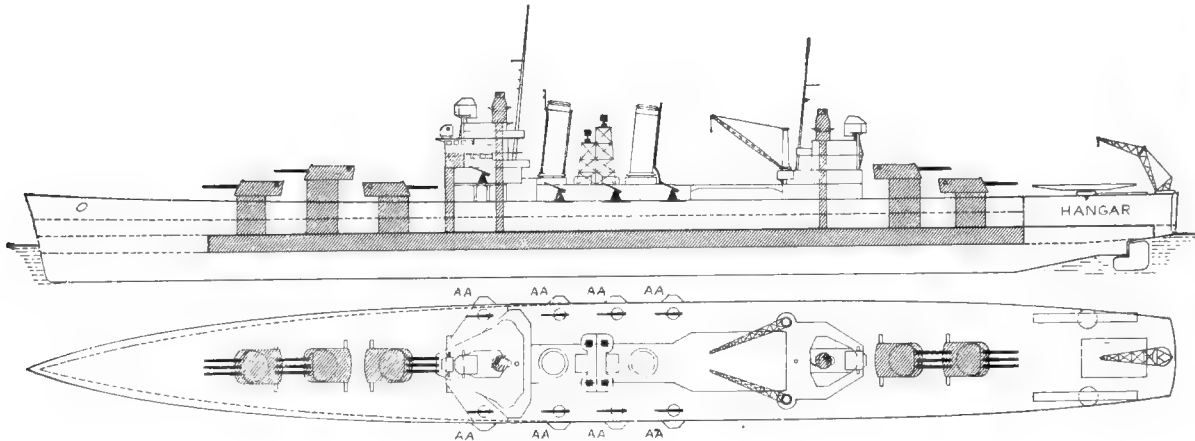
Light Cruisers (CL).

2 “ Brooklyn ” Class.

HONOLULU

SAVANNAH

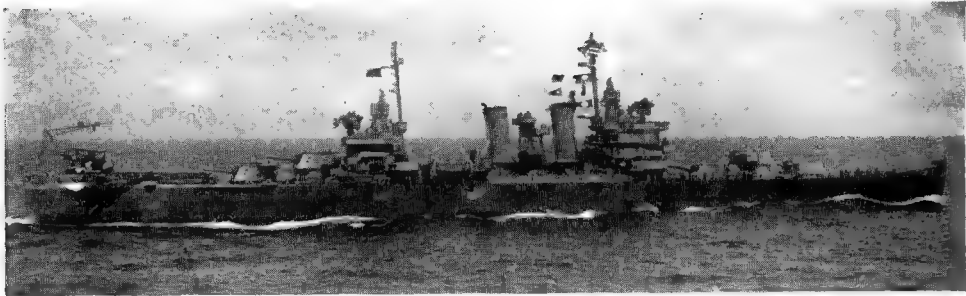
Displacement : Savannah, 9,475 tons ; Honolulu, 9,650 tons (14,000 and 12,600 tons full load respectively)  
Dimensions : Length : 600 (w.l.), 608½ (o.a.) feet. Beam : 69 feet. Draught : 19½ (mean), 24 (max.) feet  
Guns : 15—6 inch, 47 cal., 8—5 inch, 38 cal. (twin mounts), 28—40 mm. AA., 24—20 mm. AA.  
Aircraft : 4 (see Notes)  
Armour : 4"–1½" side, 3"–2" decks, 5"–3" gunhouses, 8" C.T.  
Machinery : Geared turbines. 4 shafts. S.H.P. : 100,000 = 32.5 kts.  
Boilers : 8 Babcock & Wilcox Express type  
Oil fuel : 2,100 tons  
Radius : 14,500 miles at 15 kts.  
Complement : 975 (peace), 1,200 (war)



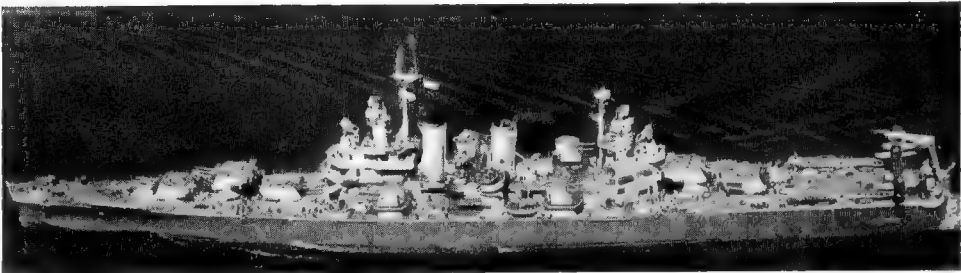
Note to Plan.—Superstructure since reduced, bulges added, and beam increased.

General Notes.—Honolulu was severely damaged by a bomb at Pearl Harbour on Dec. 7, 1941 ; and on Oct. 20, 1944, off Leyte, she was again badly damaged by a torpedo from a Japanese aircraft. Honolulu and Savannah, when refitted, had anti-torpedo bulges added, increasing beam by 8 feet. Both out of commission, in reserve.

Aircraft Notes.—The hangar included in hull right aft could, if necessary, accommodate 6 aircraft, with duplicate parts and spare engines, though 4 was normal complement. Presence of this hangar accounts for very wide flat counter and high freeboard aft, which is also utilised to give after guns higher command. The two catapults are mounted as far outboard as possible and the revolving crane is placed at the extreme stern, overhanging the hatch.



Added 1953, U.S. Navy, Official.



SAVANNAH.

Added 1950, U.S. Navy, Official.

Class Notes.—Brooklyn and Nashville of this class were transferred to Chile ; Philadelphia and St. Louis (latter ship was of slightly modified type) were transferred to Brazil ; and Boise and Phoenix (of this class) transferred to Argentina, all Jan. 22-25, 1951. Two last-named ships (also Nashville and St. Louis) had been in Philadelphia with the Reserve Fleet but not a part of it, having been designated as excess to the needs of the U.S. Navy and already earmarked for disposal to South American countries. Philadelphia, which originally cost \$14,750,000, actually commissioned in Brazilian Navy 21 Aug., 1951.

No.	Name	Builders	Machinery	Laid down	Launched	Completed
CL 42	Savannah	New York S.B. Corp.	Builders in each case }	31 May 1934 10 Sept. 1935	8 May 1937 26 Aug. 1937	30 Aug. 1938 7 Sept. 1938
48	Honolulu	New York Navy Yard				

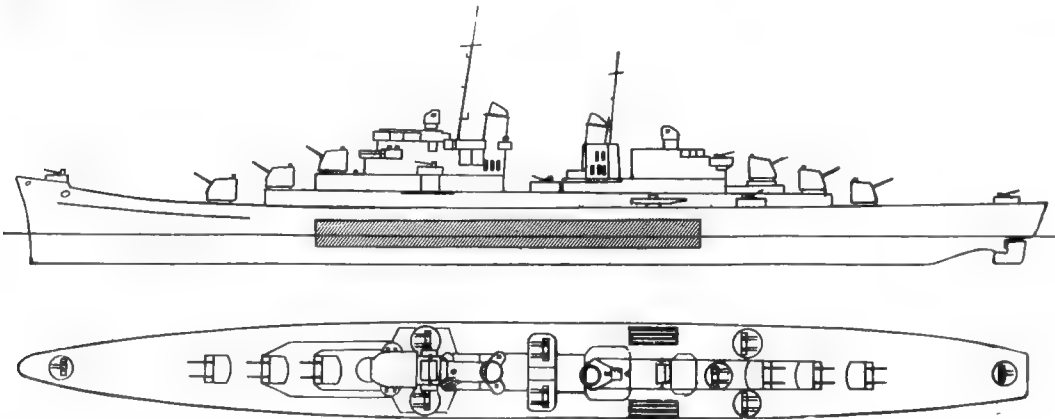
U.S.A.—Anti-Aircraft Cruisers (CLAA)

Anti-Aircraft Cruisers (CLAA).

9 “ Juneau ” Class.

FLINT (ex-Spokane)	OAKLAND	SAN JUAN
FRESNO	RENO	SPOKANE
JUNEAU	SAN DIEGO	TUCSON

Displacement 6,000 tons (8,200 tons full load except Oakland, 8,300 tons; San Juan 8,100 tons)  
Dimensions : Length : 541 feet. Beam : 52½ feet.  
Draught : 20 (mean), 24 (max.) feet  
Guns : 12—5 inch, 38 cal. (d.p.), 24 to 32—40 mm. AA. 12 to 16—20 mm. AA. (Juneau 14—3 inch in place of 40 mm. and 20 mm.)  
Aircraft : Juneau carries a helicopter  
Armour : 3½" side, 2" deck  
Machinery : Westinghouse geared turbines. 2 shafts. S.H.P. : 75,000 = 35 kts. (designed). Rated speed in service is not above 32 kts.  
Boilers : 4 Babcock & Wilcox  
Complement : 579 (peace), 700 (war)



JUNEAU.

1952 Photo, U.S. Navy, Official.



SPOKANE.

1952, Ted Stone.

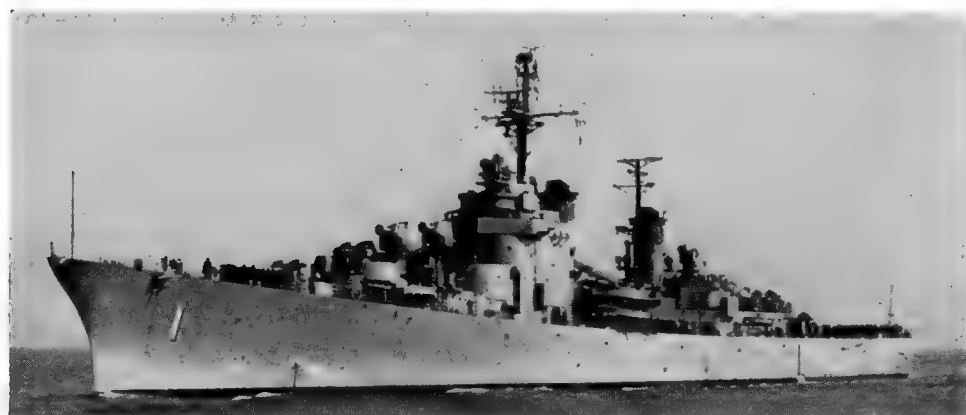
Notes to Plan.—Torpedo tubes have been removed. San Diego and San Juan had two wing turrets mounted abreast the after superstructure. In Juneau, Spokane and Fresno, “B” and “X” turrets were placed a deck lower than in earlier ships, and the torpedo tubes were omitted to improve stability.

General Notes.—Originally rated as light cruisers (CL). All recategorised as anti-aircraft cruisers (CLAA). Arrangement of main armament forward and aft is reminiscent of British “Dido” class. Bridges are reported to be armoured. The 6 earlier ships had 8—21 inch torpedo tubes in quadruple deck mountings which were removed in 1945. Juneau is the only one in commission. War losses: Atlanta, Juneau. (Two new ships of these names were built, of which the former belongs to the 10,000-ton “Cleveland” class.)

Gunnery Notes.—Juneau has undergone armament conversion. She mounts 3-inch guns in place of former 40 mm. and 20 mm. pieces.

No.	Name	Builders	Laid down	Launched	Completed
CLAA 53	San Diego	Federal S.B. & D.D. Co., Kearny	27 Mar. 1940	26 July 1941	10 Jan. 1942
54	San Juan		15 May 1940	6 Sept. 1941	28 Feb. 1942
95	Oakland		13 July 1941	23 Oct. 1942	17 July 1943
96	Reno	Bethlehem Steel Co., S. Francisco	12 Aug. 1941	23 Dec. 1942	28 Dec. 1943
97	Flint		23 Oct. 1942	25 Jan. 1944	31 Aug. 1944
98	Tucson		23 Dec. 1942	3 Sept. 1944	3 Feb. 1945
119	Juneau	Federal S.B. & D.D. Co., Kearny	15 Sept. 1944	15 July 1945	14 Feb. 1946
120	Spokane		15 Nov. 1944	22 Sept. 1945	17 May 1946
121	Fresno		12 Feb. 1945	5 Mar. 1946	27 Nov. 1946

**Destroyer Leader (DL).**  
(Formerly rated as *Cruiser, Hunter Killer Ship, CLK*).  
I "Norfolk" Type.



NORFOLK.

1954, U.S. Navy, Official.



NORFOLK.

1954, U.S. Navy, Official.

**NORFOLK**

**Builders :** New York Shipbuilding Corporation, Camden, New Jersey  
**Ordered :** 17 Nov. 1948  
**Laid down :** 1 Sept., 1949  
**Launched :** 29 Dec. 1951  
**Completed :** 4 Mar. 1953

**Displacement :** 5,600 tons standard (7,300 tons full load)  
**Dimensions :** Length : 520 (w.l.), 540 (o.a.) feet. Beam : 54 feet. Draught : 26 (max.) feet  
**Guns :** 8—3 inch, 70 cal. in twin mounts ; 8—20 mm. AA. (twin mounts)  
**Tubes :** 4 Mark 24  
**A/S Weapons :** 8 Mark 108 ASW rocket launchers  
**Machinery :** 2 sets General Electric geared turbines. 2 shafts. S.H.P. : 80,000 = 32 kts. (34 kts. max.)  
**Boilers :** 4 Babcock & Wilcox two drum, 1,200 lb. per sq. in. pressure, 950 deg. F.  
**Complement :** 480

**General Notes.**—Designed as a special category of anti-submarine vessel of cruiser size and entirely novel type to engage in hunter killer operations even in the worst weather, and incorporates lessons learned at Bikini in her construction. Built on a true cruiser hull. Cost, exclusive of armament, reported to be \$44,000,000. Re-rated in 1951 as a Destroyer Leader, a new category to the U.S. Navy. Fitted with newly developed communications equipment including radar, sonar, and electronics gear. Will serve as flagship for destroyer screens attached to fast carrier forces.

**Engineering Notes.**—The trial speed is reported to have exceeded 34 knots. (35 knots reached.) Shafts fitted with six-bladed propellers.

**Appearance Notes.**—Has hull form resembling that of "Juneau" class, with tall bridge structure and curved stem. Note bow view similarity to Mitscher class, though a much larger ship.

**Class Notes.**—Two Hunter-Killer Ships were authorised in 1947. *Norfolk* (originally CLK 1) now DL-1 (Destroyer Leader) was commissioned for service 4 March 1953. The construction of her sister ship, CLK 2, was deferred in 1949.

**Destroyer Leaders (DL).**  
4 "Mitscher" Class.



MITSCHER.

1954, Ted Stone.



MITSCHER

1953, courtesy Builders

**MITSCHER** (ex-DD 927) **JOHN S. MCCAIN** (ex-DD 928) **WILLIS A. LEE** (ex-DD 929) **WILKINSON** (ex-DD 930)

**Displacement :** 3,700 tons (4,400 tons full load). Last two 4,730 tons full load  
**Dimensions :** 450 (pp.), 493 (o.a.) × 49 × 20 feet  
**Guns :** 2—5 inch 50 cal. d.p. (single, new pattern), 4—3 inch 70 cal. (twin new pattern)  
**Tubes :** 4 fixed  
**A/S Weapons :** 2 Mark 108 ASW rocket launchers  
**Machinery :** Geared steam turbines. 2 shafts. S.H.P. : 80,000 = 35 kts.  
**Boilers :** DL 2, DL 3 : 4 Combustion Engineering, controlled circulation type, 1,225 lb. per sq. in. pressure, 950 deg. F. superheat.  
DL 4, DL 5 : 4 Foster Wheeler, 2 drum type, 1,200 lb. per sq. in. pressure, 950 deg. superheat  
**Complement :** 322 (peace), 440 (war)

**Notes.**—Begun as DDs, but re-rated as DLs while building in 1951. The largest destroyers ever built in the United States and in the world. Larger than some ships rated as light cruisers in other countries. Officially stated cost \$29,500,000 each exclusive of armament. Of a new design specifically constructed as a long-range fleet type for anti-submarine duties. Authorised February 1948. All ordered Aug. 3, 1948. Named in honour of fighting admirals of Second World War. Carry the latest surface, underwater and anti-aircraft weapons. Equipped with newly developed electronic devices for hunter-killer missions. Propelling machinery includes many advanced engineering features not previously installed in fighting ships, to give sea speeds of 32 to 35 knots.

**Gunnery Notes.**—Two 5 inch guns are fully automatic loading, rapid fire, radar controlled. Two 3 inch, 50 cal. mounts are being replaced by newer longer range 3 inch, 70 cal. guns.

**Engineering Notes.**—DL 2, DL 3 : 2 General Electric turbine reduction type. Main reduction gears : General Electric double reduction.  
DL 4, DL 5 : 2 Westinghouse, turbine reduction type. Main reduction gears : De Laval double reduction.

No.	Name	Builders	Engineers	Laid down	Launched	Completed
DL 2	Mitscher	Bath Iron Works, Corp.	General Electric	3 Oct. 1949	26 Jan. 1952	16 May 1953
DL 3	John S. McCain			24 Oct. 1949	12 July 1952	12 Oct. 1953
DL 4	Willis A. Lee	Bethlehem, Quincy	Westinghouse	1 Nov. 1949	26 Jan. 1952	
DL 5	Wilkinson			1 Feb. 1950	23 Apr. 1952	

U.S.A.—Destroyers

Destroyers (DD)

11 "Forrest Sherman" Class. New Construction.



FORREST SHERMAN (drawing from official model).

1953, C. W. E. Richardson

3 Bath Iron Works, Corpn.

DD  
931 FORREST SHERMAN

DD  
932 JOHN PAUL JONES  
933 BARRY

3 Bethlehem Steel Corpn., Quincy.

DD  
936

DD  
937  
938

Displacement : 2,850 tons standard (3,807 tons full load)  
Dimensions : 418½ × 45 × 19½ feet  
Guns : 3—5 inch 54 cal. d.p. (1 forward, 2 aft), 4—3 inch, 70 cal. AA.  
Tubes : 4—21 inch  
A/S weapons : Hedgehogs, depth charge projectors, depth charge tracks  
Machinery : Geared steam turbines, 2 shafts  
Boilers : 4  
Complement : 337

Notes.—The construction of first three was provided for under the 1952-53 programme. Will not be radical in design but will embody certain improvements in armament. Increased freeboard forward. Entire ship's structure above main deck including gun foundations, will be of aluminium to obtain maximum stability while maintaining minimum ship displacement. *Forrest Sherman* laid down 27 Oct. 1953. To be completed autumn 1955. Contract for 3 931 class awarded to Bethlehem Steel Corpn. 2 Feb. 1954 (\$53,022,000). Five more DD requested in 1955 appropriations.

Experimental Destroyer (AG, ex-EDD)



1953, U.S. Navy, Official.

AG 152 TIMMERMAN (ex-EDD 828)

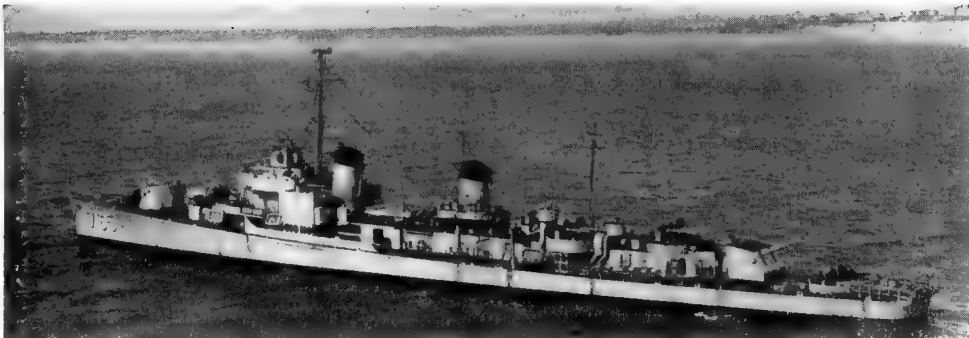
Displacement : 2,420 tons standard (3,540 tons full load)  
Dimensions : 390½ × 40½ × 12½ feet  
Guns : 6—5 inch, 6—3 inch  
Machinery : Turbines : 1 Westinghouse, turbine reduction type ; 1 General Electric, turbine reduction type. Main reduction gears : 1 Westinghouse single reduction ; 1 General Electric planetary reduction ; 1 De Laval double reduction. 2 shafts. S.H.P. : 100,000 = 40 kts. (exceeded on trials).  
Boilers : 1 Foster Wheeler, 2 drum type, 875 lb. per sq. in. pressure, 1,050 deg. superheat. 1 Babcock & Wilcox, 2 drum type, 875 lb. per sq. in. pressure, 1,050 deg. superheat. 2 Combustion Engineering, free circulation type, 2,000 lb. per sq. in. pressure, 1,050 deg. superheat.  
Complement : 350 (war)

General Notes.—This ship was completed to a new design. She is a modification of the original "Gearing" type. First ship of post-war construction completed for the Navy. No tubes. Built by Bath Iron Works Corpn. Laid down 1 Oct. 1945. Launched 19 May 1951. Commissioned 26 September 1952. Reclassified from DD 828 to AG 152 in Jan 1954.

Engineering Notes.—Fitted with "more powerful machinery of light weight," employing much higher temperatures and pressures than hitherto. The reduction in weight is far beyond anything previously attempted to determine how light naval machinery can be without sacrificing required strength. Largely experimental, several novel engineering features being incorporated.

Escort Destroyers (DDE).

8 "Carpenter" Class.



KEPPLER.

1953, Skyfotos



LLOYD THOMAS.

1953, U.S. Navy, Official.

1 Bath Iron Works Corpn.

4 Bethlehem, S. Pedro

1 Consolidated Steel Corpn. (Completed by Newport News)

DDE

827 ROBERT A. OWENS (15 July 1946)

DDE

858 FRED T. BERRY (28 Jan. 1945)

DDE

825 CARPENTER (30 Dec. 1945)

2 Bethlehem, S. Francisco

765 KEPPLER (24 June 1946)

861 HARWOOD (24 May 1945)

860 McCAFFERY (12 April 1945)

859 NORRIS (25 Feb. 1945)

764 LLOYD THOMAS (5 Oct. 1945)

Displacement : 2,425 tons, *Carpenter* and *Robert A. Owens* 2,500 tons (over 3,300 tons full load)  
Dimensions : 390½ (o.a.) × 40½ × 19 (max.) feet  
Guns : 4 to 6—3 inch (twin-automatic), 2 large ahead throwing A/S weapons, 2 or 3 hedgehogs or zebras in *Carpenter* and *Robert A. Owens*; 4—5 inch, 8—3 inch, 1 large A/S weapon in others  
Tubes : 5—21 inch (none in *Carpenter* and *Robert A. Owens*)  
Machinery : Geared turbines. 2 shafts. S.H.P. : 60,000 = 35 kts.  
Boilers : 4  
Complement : 350

Notes.—Originally designed as units of the "Gearing" class. *Robert A. Owens* and *Carpenter*, towed to Newport News in 1947, were completed as Hunter-killer Destroyers on Nov. 5, 1949 and Dec. 15, 1949, respectively. The remaining six were converted under the 1949 Programme. Launch dates above. They were rated as DDKs until March 4, 1950, when the DDE and DDK types merged. *Robert A. Owens* had six 3-inch guns. In *Carpenter* the forward 5-inch twin turret was removed, a pair of twin 3-inch automatic weapons substituted, and a bandstand containing a large weapon of the hedgehog type in place of the superimposed 5-inch turret. It is understood that additional multiple A/S mortars have been installed amidships and aft, and a number of Sono-buoys are included in the equipment. These are dropped in a diamond shaped pattern of five (one in the middle) outlining an area in which a submarine is suspected to be in operation. They contain microphones, and by keeping track of which picks up the loudest sound the destroyer can determine in which direction and at what speed and depth the submarine is moving. Once this is detected the destroyer moves in rapidly for the kill, laying down a pattern of depth bombs.

General Note on DDEs (former DDKs).—Vessels have been completed as such and converted from existing DDs in order to form groups for the purpose of long- and short-range interception of submarines before they can attack convoys.

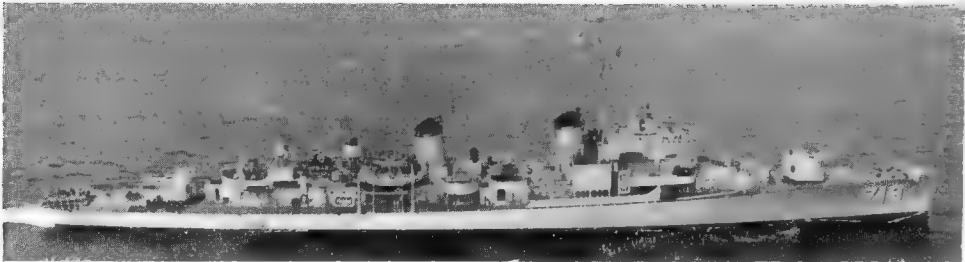
Escort Destroyers (DDE).

9 Converted “Gearing” Class.



BASILONE

1954, A. & J. Pavia.



EPPELSON.

Added 1954, U.S. Navy, Official.

3 Bath Iron Works Corpn.

837 SARSFIELD  
847 ROBERT L. WILSON  
848 WITEK

4 Consolidated Steel Corpn.

DDE  
824 BASILONE  
819 HOLDER  
818 NEW  
820 RICH

1 Bethlehem, Staten Island

DDE  
871 DAMATO

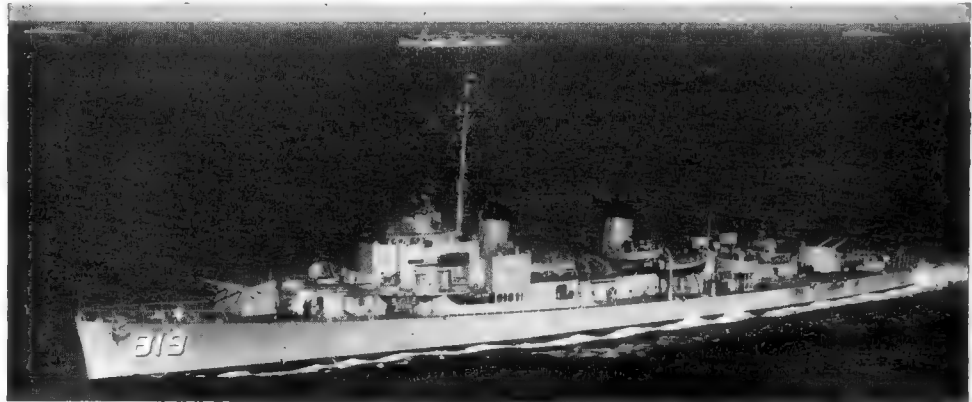
1 Federal S.B. & D.D. Co.

DDE  
719 EPPELSON

Displacement : 2,425 tons (standard) (3,300 tons full load)  
Dimensions : 390½ (o.a.) × 40½ × 19 (max.) feet  
Guns : 4—5 inch, 38 cal., 4 to 10—3 inch, 50 cal. (Basilone 4—3 inch, others 6—3 inch)  
A/S weapons : Ahead throwing A/S weapon in place of forward superimposed 5-inch twin turret  
Tubes : Removed in Basilone and Epperson. Others 5—21 inch  
Machinery : Geared turbines, 2 shafts. S.H.P. : 60,000 = 35 kts.  
Boilers : 4  
Complement : 350 (war)

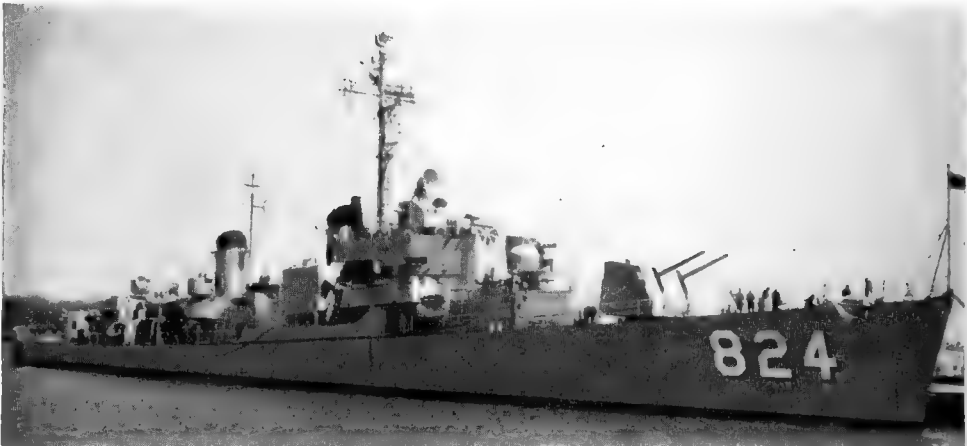
Notes.—Former destroyers (DD). Builders above. Basilone and Epperson, both completed at Bath, were two long suspended units of the “Gearing” class. They were converted to ASW (for anti-submarine warfare) and completed as escort destroyers. They are armed with new weapons and equipped with improved sonar and other electronic gear. Five other units were 4-gun “Gearings” redesignated DDEs on 4 March, 1950. The remaining two 4-gun “Gearings” (Sarsfield and Witek) were designated DDEs in 1953.

Name	Launched	Completed	Name	Launched	Completed
Basilone	21 Dec. 1945	21 July 1949	New	18 Aug. 1945	4 Apr. 1946
Damato	21 Nov. 1945	26 Apr. 1946	Rich	5 Oct. 1945	2 July 1946
Epperson	22 Dec. 1945	18 Mar. 1949	Robert L. Wilson	5 Jan. 1946	28 Mar. 1946
Holder	25 Aug. 1945	17 May 1946	Sarsfield	27 May 1945	
			Witek	2 Feb. 1945	



HOLDER.

1953 ,Skyfotos



BASILONE.

1952, U.S. Navy, Official.



U.S.A.—Destroyers

Destroyers (DD).

44 + 3 "Gearing" Class.

10 Bath Iron Works	8 Bethlehem, Staten Island	5 Federal S.B. & D.D. Co.
DD	DD	DD
826 AGERHOLM	869 ARNOLD J. ISBELL	710 GEARING
845 BAUSSELL	868 BROWNSON	712 GYATT
836 GEORGE K. MACKENZIE	865 CHARLES R. WARE	718 HAMNER
840 GLENNON	866 CONE	717 THEODORE E. CHANDLER
841 NOA	872 FORREST ROYAL	716 WILTSIE
846 OZBOURN	864 HAROLD J. ELLISON	
844 PERRY	867 STRIBLING	
839 POWER	862 VOGELGESANG	
849 RICHARD E. KRAUS (ex-AG 51)		
843 WARRINGTON		
4 Bethlehem, Quincy	8 Consolidated Steel Corp'n.	9 Todd Pacific Shipyards
853 CHARLES H. ROAN	877 BRINKLEY BASS	789 EVERSELE
850 JOSEPH P. KENNEDY JR.	884 FLOYD B. PARKS	783 GURKE (ex-John A. Bole)
852 LEONARD F. MASON	885 JOHN R. CRAIG	785 HENDERSON
851 RUPERTUS	821 JOHNSTON	788 HOLLISTER
3 Bethlehem, S. Francisco	890 MEREDITH	787 JAMES E. KYES
*766 LANSDALE	886 ORLECK	786 RICHARD B. ANDERSON
*767 SEYMOUR D. OWENS	822 ROBERT H. McCARD	782 ROWAN
763 WILLIAM C. LAWE	823 SAMUEL B. ROBERTS	*791 SEAMAN
		790 SHELTON

Displacement :	2,425 tons (3,479 tons full load)
Dimensions :	390½ (o.a.) × 40½ × 19 (max.) feet
Guns :	6—5 inch, 38 cal., 8—3 inch (see notes)
A/S Weapons :	2 hedgehogs, 1 depth charge rack, several K-guns
Tubes :	5—21 inch (quintupled)
Machinery :	Geared turbines. 2 shafts. S.H.P. : 60,000 = 35 kts.
Boilers :	4
Complement :	257 (peace), 350 (war)

General Notes.—Enlarged versions of "Allen M. Sumner" type, with extra 14 feet length, necessitated by additional installations. All having tripod mast fitted to accommodate new large radar aerials. A 165 tons, 120-foot long bow section of the uncompleted destroyer Seymour D. Owens was transferred to the Ernest G. Small to replace the latter's bow section which was lost when that ship struck a mine off Songjin, Korea, 7 Oct. 1951. 36 units converted to Radar Picket Destroyers (DDR), 8 to Hunter-Killer Destroyers (DDE formerly DDK), 9 to Escort Destroyers (DDE), Timmerman completed to a new design (EDD) but re-designated, (AG)—see preceding and following pages. Richard E. Kraus, formerly AG, restored to DD Jan. 1954. Cancellations : DD 809-816, 854-856, 891-926. Abner Read (769), Hoel (768), uncompleted and scrapped.

Gunnery Notes.—Most of this class have or will have their former 16—40 mm. AA. guns replaced by eight 3-inch guns : 2 pairs in "Q" position, one pair in "X" position and 2 single guns on either bridge wing. (See photo of Charles R. Ware).

Construction of Castle, Seaman, Lansdale, Seymour D. Owens and Woodrow R. Thompson was suspended in June 1946, so that some might be completed to modified design. Uncompleted hulls of Castle and Woodrow R. Thompson to be scrapped 1954. Sarsfield and Witek now DDEs.

Name	Launched	Completed	Name	Launched	Completed
Agerholm	30 Mar. 1946	20 June 1946	Lansdale	20 Dec. 1946	
Arnold J. Isbell	6 Aug. 1945	4 Jan. 1946	Leonard F. Mason	4 Jan. 1946	28 June 1946
Bauszell	19 Nov. 1945	7 Feb. 1946	Meredith	28 June 1945	30 Dec. 1945
Brinkley Bass	26 May 1945	27 Sep. 1945	Noa	30 July 1945	1 Nov. 1945
Brownsen	7 July 1945	16 Nov. 1945	Orleck	12 May 1945	15 Sep. 1945
Charles H. Roan	15 Mar. 1946	12 Sep. 1946	Ozbourn	22 Dec. 1945	5 Mar. 1946
Charles R. Ware	12 Apr. 1945	21 July 1945	Perry	25 Nov. 1945	17 Jan. 1946
Cone	10 May 1945	17 Aug. 1945	Power	30 June 1945	13 Sep. 1945
Eversole	8 Jan. 1946	10 May 1946	Richard B. Anderson	7 July 1945	26 Oct. 1945
Floyd B. Parks	31 Mar. 1945	31 July 1945	Richard E. Kraus	2 Mar. 1946	23 May 1946
Forrest Royal	17 Jan. 1946	28 June 1946	Robert H. McCord	9 Nov. 1945	22 Oct. 1946
Gearing	18 Feb. 1945	3 May 1945	Rowan	29 Dec. 1944	31 Mar. 1945
George H. McKenzie	13 May 1945	13 July 1945	Rupertus	21 Sep. 1945	8 Mar. 1946
Glennon	14 July 1945	4 Oct. 1945	Samuel B. Roberts	30 Nov. 1945	19 Dec. 1946
Gurke	15 Feb. 1945	12 May 1945	Seaman	20 May 1946	
Gyatt	15 Apr. 1945	2 July 1945	Seymour D. Owens	24 Feb. 1947	
Hamner	24 Nov. 1945	11 July 1946	Shelton	8 Mar. 1946	21 June 1946
Harold J. Ellison	14 Mar. 1945	23 June 1945	Stribling	8 June 1945	29 Sep. 1945
Henderson	28 May 1945	4 Aug. 1945	Theodore E. Chandler	20 Oct. 1945	21 Mar. 1946
Hollister	9 Oct. 1945	29 Mar. 1946	Vogelgesang	15 Jan. 1945	28 Apr. 1945
James E. Kyess	4 Aug. 1945	6 Feb. 1946	Warrington	27 Sep. 1945	20 Dec. 1945
John R. Craig	14 Apr. 1945	20 Aug. 1945	William C. Lawe	21 May 1945	18 Dec. 1946
Johnston	19 Oct. 1945	22 Aug. 1946	Wiltzie	31 Aug. 1945	11 Jan. 1946
Joseph P. Kennedy	26 July 1945	14 Dec. 1945			



CHARLES R. WARE.

1954, P. Sweeney.



PERRY.

1952, Wright & Logan.



MEREDITH.

1952, C. Parsons Esq.

# **Radar Picket Destroyers (DDR).** 36 Converted "Gearing" Class.



VESOLE.

1954, A. & J. Pavia.

15 Bath Iron Works Corpn.

**DDR**  
807 BENNER  
835 CHARLES P. CECIL  
805 CHEVALIER  
808 DENNIS J. BUCKLEY  
816 ERNEST G. SMALL  
830 EVERETT F. LARSON  
842 FISKE  
742 FRANK KNOX  
831 GOODRICH  
832 HANSON  
833 HERBERT J. THOMAS  
806 HIGBEE  
829 MYLES C. FOX  
743 SOUTHERLAND  
834 TURNER

14 Consolidated Steel Co. pn.

**DDR**  
881 BORDELON  
817 CORRY  
874 DUNCAN  
880 DYESS  
882 FURSE  
873 HAWKINS  
875 HENRY W. TUCKER  
879 LEARY  
883 NEWMAN K. PERRY  
889 O'HARE  
877 PERKINS  
876 ROGERS  
888 STICKELL  
878 VESOLE

2 Bethlehem, Staten Island

**DDR**  
870 FECHTELER  
863 STEINAKER  
  
4 Federal S.B. & D.D. Co.  
711 EUGENE A. GREENE  
713 KENNETH D. BAILEY  
715 WILLIAM M. WOOD  
714 WILLIAM R. RUSH

1 Todd Pacific Shipyards  
784 MCKEAN

Displacement : 2,425 tons (3,300 tons full load)  
Dimensions : 390½ (o.a.) × 40½ × 19 (max.) feet  
Guns : 6—5 inch, 38 cal., 12—40 mm. AA. (or 6 to 10—3 inch, 50 cal. AA. in place of 40 mm.)  
Machinery : Geared turbines, 2 shafts. S.H.P. : 60,000 = 35 kts.  
Boilers : 4  
Complement : 350 (war)

**General Notes.**—Builders see above. Similar to "Gearing" class. Main differences are that the torpedo tubes are removed with tripod radar mainmast in place of forward torpedo mounting. Tripod radar mainmast tower removed and radar located aft of No. 2 stack in Goodrich, Lsary, Newman K. Perry, Herbert J. Thomas and Ernest G. Small (see photo of William R. Rush, top right). All converted from DDs to DDRs and fitted with early warning radar to serve as long-range-warning picket vessels against aircraft.  
**Gunnery Notes.**—Twin mounted 3-inch guns have replaced 40 mm. and 20 mm. guns in Bordelon, Chevalier, Corry, Dyess, Herbert J. Thomas, Southerland.

Name	Launched	Completed	Name	Launched	Completed
Benner	20 Nov. 1944	13 Feb. 1945	Henry W. Tucker	8 Nov. 1944	12 Mar. 1945
Bordelon	3 Mar. 1945	5 June 1945	Herbert J. Thomas	25 Mar. 1945	29 May 1945
Charles P. Cecil	22 Apr. 1945	29 June 1945	Higbee	12 Nov. 1944	27 Jan. 1945
Chevalier	29 Oct. 1944	9 Jan. 1945	Kenneth D. Bailey	17 June 1945	31 July 1945
Corry	28 July 1945	26 Feb. 1946	Leary	20 Jan. 1945	7 May 1945
Dennis J. Buckley	20 Dec. 1944	2 Mar. 1945	McKean	31 Mar. 1945	9 June 1945
Duncan	27 Oct. 1944	25 Feb. 1945	Myles C. Fox	13 Jan. 1945	20 Mar. 1945
Dyess	26 Jan. 1945	21 May 1945	Newman K. Perry	17 Mar. 1945	26 July 1945
Ernest G. Small	9 June 1945	21 Aug. 1945	O'Hare	22 June 1945	27 Nov. 1945
Eugene A. Greene	18 Mar. 1945	8 June 1945	Perkins	7 Dec. 1944	5 Apr. 1945
Everett F. Larson	28 Jan. 1945	6 Apr. 1945	Rogers	20 Nov. 1944	26 Mar. 1945
Fechtelner	19 Sep. 1945	3 Jan. 1946	Southerland	5 Oct. 1944	22 Dec. 1944
Fiske	8 Sep. 1945	28 Nov. 1945	Steinaker	13 Feb. 1945	26 May 1945
Frank Knox	17 Sep. 1944	11 Dec. 1944	Stickell	16 June 1945	30 Oct. 1945
Furse	9 Mar. 1945	10 July 1945	Turner	8 Apr. 1945	12 June 1945
Goodrich	25 Feb. 1945	24 Apr. 1945	Vesole	29 Dec. 1944	23 Apr. 1945
Hanson	11 Mar. 1945	11 May 1945	William M. Wood	29 July 1945	23 Nov. 1945
Hawkins	7 Oct. 1944	10 Feb. 1945	William R. Rush	8 July 1945	21 Sep. 1945



WILLIAM R. RUSH (note radar aft)

1954, A. & J. Pavia.



NEWMAN K. PERRY.

1953, A. & J. Pavia.



TURNER.

Added 1953, U.S. Navy, Official.

U.S.A.—Destroyers

Destroyers (DD)

53 “Allen M. Sumner” Class.

11 Bath Iron Works Corpn.

- DD
- 722 BARTON
- 730 COLLETT
- 732 HYMAN
- 727 DE HAVEN
- 724 LAFFEY
- 729 LYMAN K. SWENSON
- 731 MADDOX
- 728 MANSFIELD
- 725 O'BRIEN
- 734 PURDY
- 723 WALKER

6 Bethlehem Steel Co. (S. Francisco)

- 761 BUCK
- 762 HENLEY
- 760 JOHN W. THOMASON
- 759 LOFBERG
- 757 PUTNAM
- 758 STRONG

4 Bethlehem Steel Co. (S. Pedro)

- DD
- 857 BRISTOL
- 776 JAMES C. OWENS
- 770 LOWRY
- 775 WILLARD KEITH

10 Bethlehem Steel Co. (Staten Island)

- 752 ALFRED A. CUNNINGHAM
- 756 BEATTY
- 744 BLUE
- 745 BRUSH
- 754 FRANK E. EVANS
- 748 HARRY E. HUBBARD
- 755 JOHN A. BOLE
- 753 JOHN R. PIERCE
- 747 SAMUEL L. MOORE
- 746 TAUSSIG

17 Federal S.B. & D.D. Co.

- 692 ALLEN M. SUMNER
- 698 AULT
- 704 BORIE

- DD
- 697 CHARLES S. SPERRY
- 705 COMPTON
- 696 ENGLISH
- 706 GAINARD
- 702 HANK
- 708 HARLAN R. DICKSON
- 700 HAYNSWORTH
- 709 HUGH PURVIS
- 694 INGRAHAM
- 701 JOHN W. WEEKS
- 693 MOALE
- 707 SOLEY
- 699 WALDRON
- 703 WALLACE L. LIND

5 Todd Pacific Shipyards

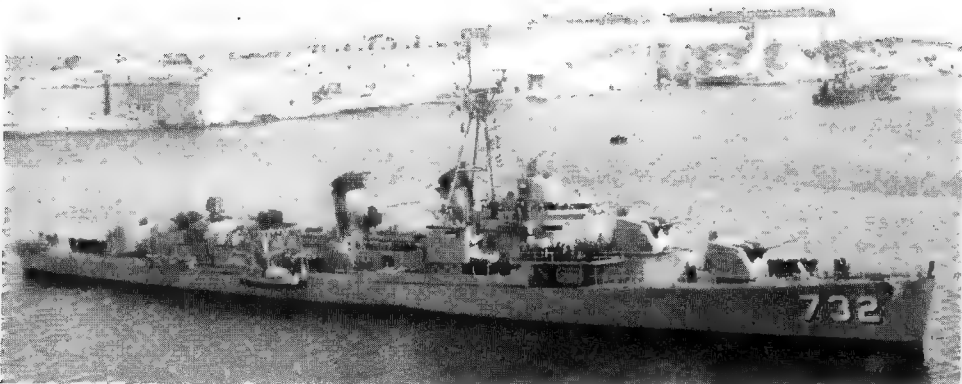
- 779 DOUGLAS H. FOX
- 778 MASSEY
- 781 ROBERT K. HUNTINGTON
- 780 STORMES
- 777 ZELLARS

- Displacement: 2,200 tons (3,000 tons full load)
- Dimensions: 376½ x 40½ x 19 (max.) feet
- Guns: 6—5 inch, 38 cal., 6 to 10—3 inch, 50 cal. AA.
- Tubes: 5—21 inch (quintupled)
- A/S weapons: 2 hedgehogs mounted on deckhouse abeam bridge front. 6 D.C.T.
- Machinery: Geared turbines. 2 shafts. S.H.P. : 60,000 = 34 kts.
- Boilers: 4 Babcock & Wilcox
- Complement: 350 (war)

General Notes.—Have a larger radius of action than any destroyers previously constructed. Type is an enlargement and modification of Fletcher design. After set of tubes was removed. Some now have 3-inch AA. guns in place of former 40 mm. and 20 mm. Cost \$8,000,000 each, exclusive of armament, etc. *Brush* and *Mansfield* struck floating mines off Korea, Sep. 27, 1950, and Sep. 30, 1950 respectively, but made port. Twelve of this class (two scrapped) were fitted for minelaying and re-rated as DM 23-24 (see page 415). *Hugh W. Hadley* was sold. War losses : *Cooper*, *Drexler*, *Mannert L. Abele*, *Meredith*.

Gunnery Notes.—40 mm. and 20 mm. mounts are replaced by 3-inch, 50 cal. mounts in the following vessels :—*Borie*, *Frank E. Evans*, *Harry E. Hubbard*, *Zellars* and others.

Name	Launched	Completed	Name	Launched	Completed
Alfred A. Cunningham	3 Aug. 1944	23 Nov. 1944	John A. Boyle	1 Nov. 1944	3 Mar. 1945
Allen M. Sumner	15 Dec. 1943	26 Jan. 1944	John R. Pierce	1 Sep. 1944	30 Dec. 1944
Ault	26 Mar. 1944	31 May 1944	John W. Thomason	30 Sep. 1944	11 Oct. 1945
Barton	10 Oct. 1943	30 Dec. 1943	John W. Weeks	21 May 1944	21 July 1944
Beatty	30 Nov. 1944	31 Mar. 1945	Laffey	21 Nov. 1943	8 Feb. 1944
Blue	28 Nov. 1943	20 Mar. 1944	Lofberg	12 Aug. 1944	26 Apr. 1945
Borie	4 July 1944	21 Sep. 1944	Lowry	6 Feb. 1944	23 July 1944
Bristol	29 Oct. 1944	17 Mar. 1945	Lyman K. Swenson	12 Feb. 1944	2 May 1944
Brush	28 Dec. 1943	17 Apr. 1944	Maddox	19 Mar. 1944	2 June 1944
Buck	11 Mar. 1945	28 June 1945	Mansfield	29 Jan. 1944	14 Apr. 1944
Charles H. Sperry	13 Mar. 1944	17 May 1944	Massey	19 Aug. 1944	24 Nov. 1944
Collett	5 Mar. 1944	16 May 1944	Moale	16 Jan. 1944	28 Feb. 1944
Compton	17 Sep. 1944	4 Nov. 1944	O'Brien	8 Dec. 1943	25 Feb. 1944
De Haven	9 Jan. 1944	31 Mar. 1944	Purdy	7 May 1944	18 July 1944
Douglas H. Fox	30 Sep. 1944	26 Dec. 1944	Putnam	26 Mar. 1944	12 Oct. 1944
English	27 Feb. 1944	4 May 1944	Robert K. Huntington	10 Dec. 1944	3 Mar. 1945
Frank E. Evans	3 Oct. 1944	3 Feb. 1944	Soley	8 Sep. 1944	7 Dec. 1944
Gainard	17 Sep. 1944	23 Nov. 1944	Stormes	4 Nov. 1944	27 Jan. 1945
Hank	21 May 1944	28 Aug. 1944	Strong	22 Apr. 1944	8 Mar. 1945
Harlan R. Dickson	17 Dec. 1944	17 Feb. 1945	Samuel L. Moore	23 Feb. 1944	24 June 1944
Harry E. Hubbard	24 Mar. 1944	22 July 1944	Taussig	25 Jan. 1944	20 May 1944
Haynsworth	15 Apr. 1944	22 June 1944	Waldron	26 Mar. 1944	8 June 1944
Henley	8 Apr. 1945	8 Oct. 1946	Walke	27 Oct. 1943	21 Jan. 1944
Hugh Purvis	17 Dec. 1944	1 Mar. 1945	Wallace L. Lind	14 June 1944	8 Sep. 1944
Hyman	8 Apr. 1944	16 June 1944	Willard Keith	29 Aug. 1944	27 Dec. 1944
Ingraham	16 Jan. 1944	10 Mar. 1944	Zellars	19 July 1944	25 Oct. 1944
James C. Owen	1 Oct. 1944	17 Feb. 1944			



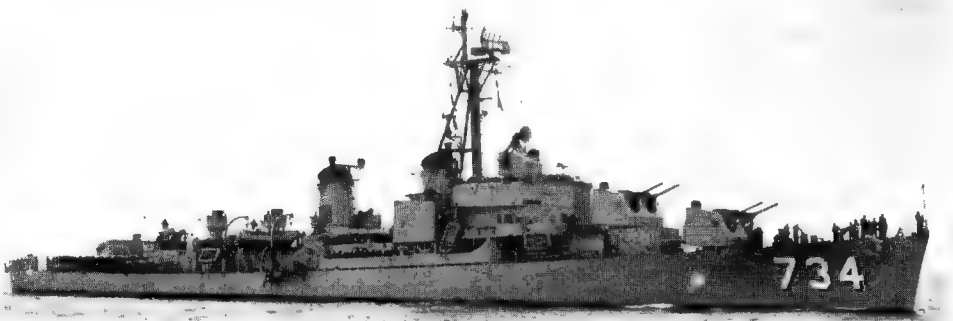
HYMAN.

1954, A. & J. Pavia.



BORIE (note new 3-inch AA. guns)

1953, Lieut. Aldo Fraccaroli.



PURDY

1952, Wright & Logan.

# Destroyers (DD).

## 53 Later "Fletcher" Class.

8 Bath Iron Works Corpn.

DD  
650 CAPERTON  
651 COGSWELL  
652 INGERSOLL  
653 KNAPP  
691 MERTZ  
690 NORMAN SCOTT  
688 REMEY  
689 WADLEIGH

2 Bethlehem Steel Co. (S. Francisco)

683 STOCKHAM  
684 WEDDERBURN

8 Bethlehem Steel Co. (Staten Island)

796 BENHAM  
657 CHARLES J. BADGER  
658 COLAHAN  
797 CUSHING  
686 HALSEY POWELL  
798 MONSSEN  
685 PICKING  
687 UHLMANN

5 Bethlehem Steel Co. (S. Pedro)

DD  
793 CASSIN YOUNG  
681 HOPEWELL  
794 IRWIN  
682 PORTERFIELD  
795 PRESTON  
  
3 Boston Navy Yard  
662 BENNION  
663 HEYWOOD L. EDWARDS  
664 RICHARD P. LEARY

3 Gulf S.B. Corpn.

654 BEARSS  
655 JOHN HOOD  
656 VAN VALKENBURGH

4 Todd Pacific Shipyards

802 GREGORY  
799 JARVIS  
800 PORTER  
804 ROOKS

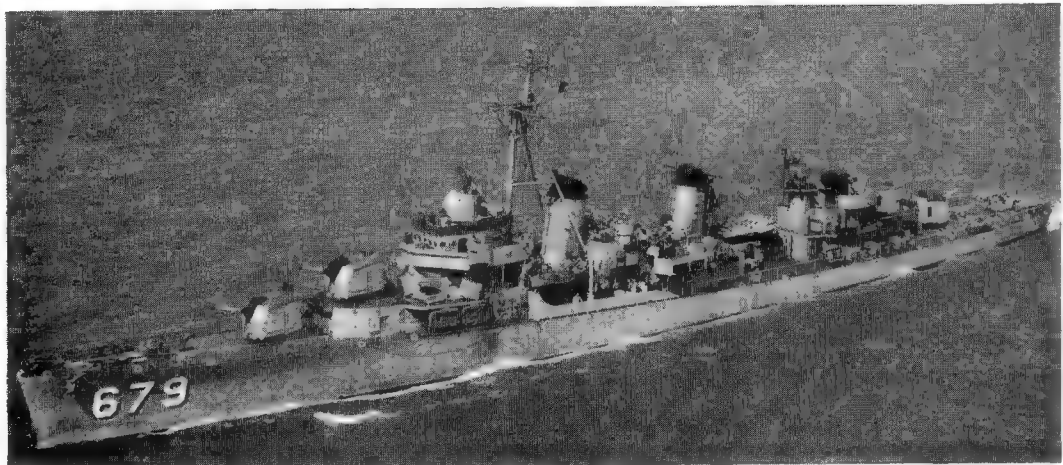
2 Charleston Navy Yard

DD  
649 ALBERT W. GRANT  
665 BRYANT  
  
18 Federal S.B. & D.D. Co.  
666 BLACK  
660 BULLARD  
667 CHAUNCEY  
668 CLARENCE K. BRONSON  
669 COTTEN  
659 DASHIELL  
670 DORTCH  
671 GATLING  
672 HEALY  
673 HICKOX  
674 HUNT  
661 KIDD  
675 LEWIS HANCOCK  
677 McDERMUT  
678 McGOWAN  
679 McNAIR  
676 MARSHALL  
680 MELVIN

Displacement : 2,050 tons (2,750 tons full load)  
Dimensions : 376½ (o.a.) × 39½ × 18 (max.) feet  
Guns : 5—5 inch, 38 cal., 10—40 mm., 8—20 mm. AA. (20 mm. removed from all active units)  
Converted ships : 4—5 inch, 38 cal., 6—3 inch, 50 cal. AA. (see Conversion Notes)  
Tubes : 5—21 inch (quintupled) Some have two sets of 5 torpedo tubes  
Machinery : General Electric geared turbines. 2 shafts. S.H.P. : 60,000 = 35 kts.  
Boilers : 4 Babcock & Wilcox  
Complement : 350 (war)

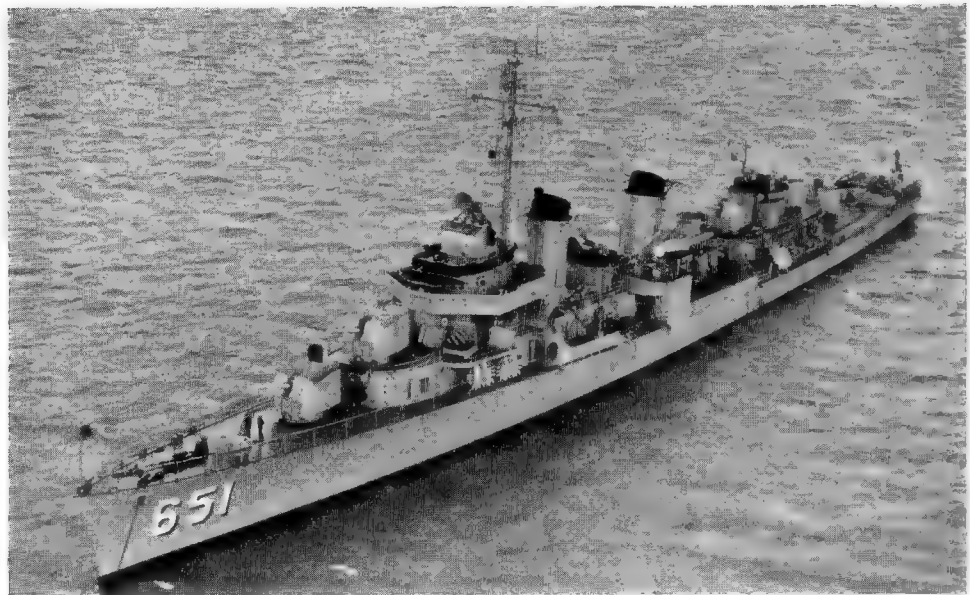
General Notes.—Laid down under 1942 Programme. Builders above. Except that they have lower fire controls and flat-faced bridges these ships are in most respects like "Fletcher" class, described on the following page. Some of the later units of Fletcher class are, in fact, almost indistinguishable from modified type—e.g., Ammen, Sigourney. Dortch was built in 158 days. War losses : Callahan, Colhoun, Little.

Name	Launched	Completed	Name	Launched	Completed
Albert W. Grant	29 May 1943	24 Nov. 1943	Irwin	31 Oct. 1943	14 Feb. 1944
Bearss	25 July 1943	12 Apr. 1944	Jarvis	14 Feb. 1944	3 June 1944
Benham	29 Aug. 1943	20 Dec. 1943	John Hood	23 Oct. 1943	7 June 1944
Bennion	4 July 1943	14 Dec. 1943	Kidd	28 Feb. 1943	23 Apr. 1944
Black	28 Mar. 1943	21 May 1943	Knapp	10 July 1943	15 Sep. 1943
Bullard	28 Feb. 1943	9 Apr. 1943	Lewis Hancock	1 Aug. 1943	29 Sep. 1943
Bryant	29 May 1943	4 Dec. 1943	McDermut	17 Oct. 1943	19 Nov. 1943
Caperton	24 July 1943	30 July 1943	McGowan	14 Nov. 1943	20 Dec. 1943
Cassin Young	12 Sep. 1943	31 Dec. 1943	McNair	14 Nov. 1943	30 Dec. 1943
Charles J. Badger	3 Apr. 1943	23 July 1943	Marshall	29 Aug. 1943	16 Oct. 1943
Chauncey	28 Mar. 1943	31 May 1943	Melvin	17 Oct. 1943	24 Nov. 1943
Clarence K. Bronson	18 Apr. 1943	11 June 1943	Mertz	11 Sep. 1943	19 Nov. 1943
Cogswell	5 June 1943	17 Aug. 1943	Monsen	29 Oct. 1943	12 Feb. 1944
Colahan	2 May 1943	23 Aug. 1943	Norman Scott	28 Aug. 1943	5 Nov. 1943
Cotton	12 June 1943	24 July 1943	Picking	31 May 1943	21 Sep. 1943
Cushing	30 Sep. 1943	17 Jan. 1944	Porter	13 Mar. 1944	24 June 1944
Dashiell	6 Feb. 1943	20 Mar. 1943	Porterfield	13 June 1943	20 Mar. 1944
Dortch	20 June 1943	7 Aug. 1943	Preston	12 Dec. 1943	30 Sep. 1943
Gatling	20 June 1943	29 Aug. 1943	Remy	24 July 1943	23 Feb. 1944
Gregory	8 May 1944	29 July 1944	Richard P. Leary	6 Oct. 1943	2 Sep. 1944
Halsey Powell	30 June 1943	25 Oct. 1943	Rooks	6 June 1944	11 Feb. 1944
Healy	4 July 1943	3 Sep. 1943	Stockham	25 July 1943	11 Feb. 1944
Heywood L. Edwards	6 Oct. 1943	26 Jan. 1944	Uhlmann	30 July 1943	22 Nov. 1943
Hickox	4 July 1943	10 Sep. 1943	Van Valkenburgh	19 Dec. 1943	2 Aug. 1944
Hopewell	2 May 1943	30 Sep. 1943	Wadleigh	7 Aug. 1943	19 Oct. 1943
Hunt	1 Aug. 1943	22 Sep. 1943	Wedderburn	1 Aug. 1943	9 Mar. 1944
Ingersoll	28 June 1943	31 Aug. 1943			



McNAIR (6—3 inch guns).

1953, Skyfotos.



COGSWELL.

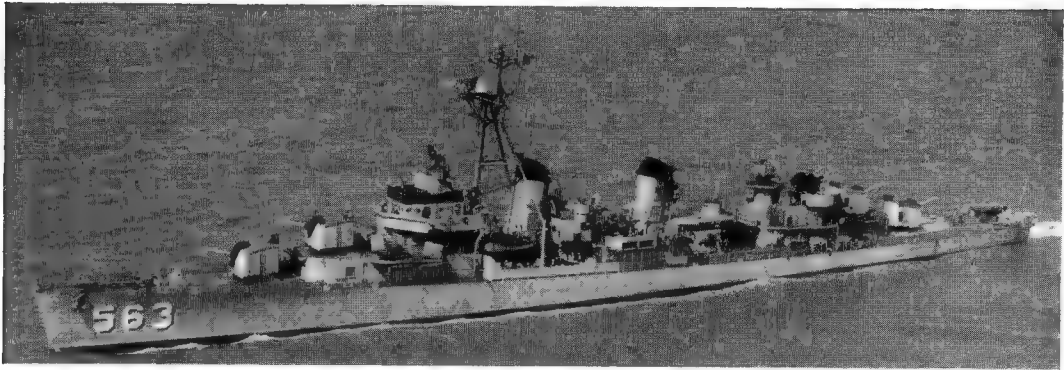
1953, Skyfotos.

Conversion Notes.—Black, Cogswell, Dortch, John Hood, McGowan, McNair, Picking, Preston and many others have 4—5 inch (two forward, two aft), 6—3 inch, 50 cal. AA. (one pair superfiring aft, two pairs between the funnels). 5 torpedo tubes abaft after funnel. A 3-inch director on a tall pedestal replaces 3rd 5-inch in "Q" position. The forward torpedo bank between the funnels was suppressed. These ships have a tripod mast (see photo of McNair). All vessels of the class have been or are being similarly rearmed except Albert W. Grant, Bennion, Bullard, Bryant, Heywood L. Edwards, Melvin, Mertz, Norman Scott, Richard P. Leary, which are in reserve and mount their original battery.



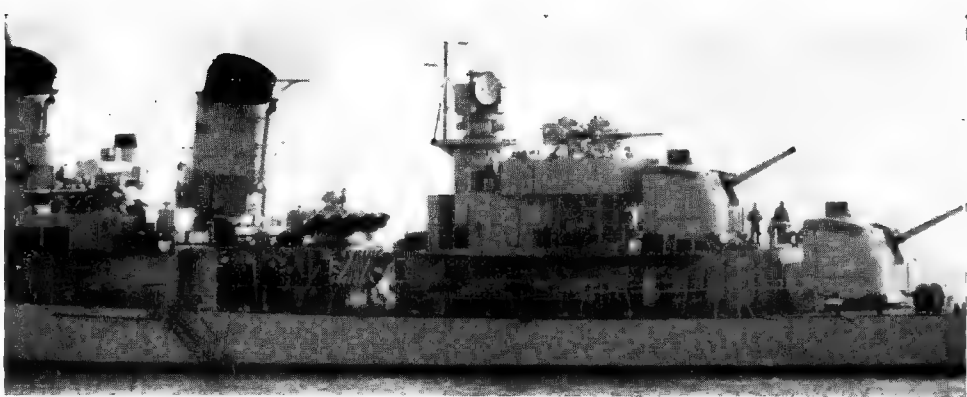
Destroyers (DD).

78 "Fletcher" Class.



ROSS (new 3-inch).

1954, Skyfotos.



AMMEN (note new 3-inch AA. guns).

1953, Lieut. Aldo Fraccaroli.

**DD**  
8 Boston Navy Yard  
473 BENNETT  
581 CHARETTE  
582 CONNER  
474 FULLAM  
472 GUEST  
583 HALL  
485 HARADEN  
575 HUDSON  
6 Charleston Navy Yard  
587 BELL  
588 BURNS  
589 IZARD  
590 PAUL HAMILTON  
478 STANLEY  
479 STEVENS  
7 Puget Sound Navy Yard  
480 HALFORD  
594 HART (ex-Mansfield)  
592 HOWORTH  
593 KILLEN  
595 METCALFE  
596 SHIELDS  
597 WILEY  
4 Federal S.B. & D.D. Co.  
448 LA VALLETTE  
500 RINGOLD  
501 SCHROEDER  
502 SIGSBEE

Displacement :  
Dimensions :  
Guns :  
Tubes :  
Machinery :  
Boilers :  
Complement :

**DD**  
11 Bath Iron Works Corpn.  
629 ABBOT  
515 ANTHONY  
630 BRAINE  
509 CONVERSE  
631 ERBEN  
511 FOOTE  
642 HALE  
643 SIGOURNEY  
644 STEMBEL  
513 TERRY  
516 WADSWORTH  
13 Bethlehem (S. Francisco)  
527 AMMEN  
531 HAZELWOOD  
532 HEERMAN  
534 McCORD  
535 MILLER  
528 MULLANY (ex-Beatty)  
536 OWEN  
538 STEPHEN POTTER  
537 THE SULLIVANS (ex-Putnam)  
539 TINGEY  
530 TRATHEN  
540 TWINING  
541 YARNALL  
4 Bethlehem (S. Pedro)  
544 BOYD  
545 BRADFORD  
546 BROWN  
547 COWELL

2,050 tons standard (2,750 tons full load)  
376½ (o.a.) × 39½ × 12½ (mean), 18 (max.) feet  
5—5 inch, 38 cal., 6—40 m. Bofors, 10—20 mm. Oerlikon (see Conversion Notes)  
Rearmed ships: 4—5 inch, 38 cal., 6—3 inch, 50 cal. AA.  
5—21 inch (quintupled). Some have two sets of 5 torpedo tubes  
General Electric geared turbines. 2 shafts. S.H.P.: 60,000 = 35 kts.  
4 Babcock & Wilcox  
350 (war)

General Notes.—Laid down under 1940-41 Programme. Builders above. During the war six units (including Halford in 1943) were experimentally fitted with a seaplane and catapult, in place of deckhouse between "Q" and "X" turrets (armament being temporarily reduced by 1—5 inch and 5 T.T.); and some, including Young, had only one set of tubes. All those with two sets now reduced to one. Nineteen of these ships were modified for duty as escort destroyers (DDE), viz.: Bache, Beale, Charles Ausburne, Conway, Cony, Eaton, Fletcher, Jenkins, Murray, Nicholas, O'Bannon, Philip, Radford, Renshaw, Sautley, Spraston, Taylor, Walker and Waller—see next page. War losses: Abner Read, Brownson, Bush, Chevalier, De Haven, Halligan, Hoel, Johnston, Longshaw, Luce, Morrison, Pringle, Spence, Strong, Twiggs, William D. Porter. Heavily damaged and subsequently scrapped: Evans, Haggard, Leutze, Newcomb, Thatcher. Sold: Hutchins. Cancelled: Percival, Watson.

**DD**  
3 Bethlehem (Staten Island)  
519 DALY  
520 ISHERWOOD  
521 KIMBERLEY  
11 Seattle-Tacoma S.B. Corpn., Seattle  
554 FRANKS  
556 HAILEY  
558 LAWS  
561 PRITCHETT  
562 ROBINSON  
563 ROSS  
564 ROWE  
565 SMALLEY  
566 STODDARD  
567 WATTS  
568 WREN  
8 Consolidated Steel Corpn., Orange, Texas  
569 AULICK  
571 CLAXTON  
572 DYSON  
573 HARRISON  
574 JOHN RODGERS  
575 MCKEE  
578 WICKES  
580 YOUNG  
3 Gulf S.B. Corpn., Chickasaw, Ala.  
550 CAPPS  
551 DAVID W. TAYLOR  
553 JOHN D. HENLEY

Name	Laid down	Launched	Completed
Abbot	21 Sep. 1942	17 Feb. 1943	23 Apr. 1943
Ammen	29 Nov. 1941	17 Sep. 1942	12 Mar. 1943
Anthony	17 Aug. 1942	20 Dec. 1942	26 Feb. 1943
Aulick	14 May 1941	2 Mar. 1942	27 Oct. 1942
Bell	24 Feb. 1942	24 June 1942	4 Mar. 1943
Bennett	10 Dec. 1941	16 Apr. 1942	9 Feb. 1943
Boyd	2 Apr. 1942	29 Oct. 1942	8 May 1943
Bradford	28 Apr. 1942	12 Dec. 1942	12 June 1943
Braine	12 Oct. 1942	7 Mar. 1943	7 May 1943
Brown	27 June 1942	22 Feb. 1943	10 July 1943
Burns	9 May 1942	8 Aug. 1942	3 Apr. 1943
Capps	12 June 1941	31 May 1942	23 June 1943
Charrette	20 Feb. 1941	3 June 1942	18 May 1943
Claxton	25 June 1941	1 Apr. 1942	8 Dec. 1942
Conner	16 Apr. 1942	18 July 1942	8 June 1943
Converse	23 Feb. 1942	30 Aug. 1942	20 Nov. 1942
Cowell	7 Sep. 1942	18 Apr. 1943	23 Aug. 1943
Daly	29 Apr. 1942	24 Oct. 1942	19 Mar. 1943
David W. Taylor	12 June 1941	4 July 1942	18 Sep. 1943
Dyson	25 June 1941	15 Apr. 1942	30 Dec. 1942
Erben	28 Oct. 1942	21 Mar. 1943	28 May 1943
Foot	14 Apr. 1942	11 Oct. 1942	22 Dec. 1942
Franks	8 Mar. 1942	7 Dec. 1942	30 July 1943
Fullam	10 Dec. 1941	16 Apr. 1942	2 Mar. 1943
Guest	27 Sep. 1941	20 Feb. 1942	15 Dec. 1942
Hale	23 Nov. 1942	4 Apr. 1943	15 June 1943
Halford	3 June 1941	29 Oct. 1942	1 May 1943
Hall	16 Apr. 1942	18 July 1942	6 July 1943
Hailey	11 Apr. 1942	9 Mar. 1943	30 Sep. 1943
Haraden	3 June 1942	7 Mar. 1943	16 Sep. 1943
Harrison	25 July 1941	7 May 1942	25 Jan. 1943
Hart	10 Aug. 1943	25 Sep. 1944	1 Dec. 1944
Hazelwood	1 Apr. 1942	20 Nov. 1942	18 June 1943
Heermann	8 May 1942	5 Dec. 1942	6 July 1943
Howorth	26 Nov. 1941	10 Jan. 1943	1 May 1944
Hudson	23 Feb. 1942	3 June 1942	13 Apr. 1943
Isherwood	12 May 1942	24 Nov. 1942	10 Apr. 1943
Izard	9 May 1942	8 Aug. 1942	15 May 1943
John D. Henley	21 July 1941	15 Nov. 1942	2 Feb. 1944

Name	Laid down	Launched	Completed
John Rodgers	25 July 1941	7 May 1942	9 Feb. 1943
Killen	26 Nov. 1941	10 Jan. 1943	1 June 1944
Kimberly	27 July 1942	4 Feb. 1943	22 May 1943
La Vallette	27 Nov. 1941	21 June 1942	11 Aug. 1942
Laws	19 May 1942	22 Apr. 1943	18 Nov. 1943
Metcalf	10 Aug. 1942	25 Sep. 1944	15 Dec. 1944
Miller	18 Aug. 1942	7 Mar. 1943	31 Aug. 1943
Mullany	15 Jan. 1942	10 Oct. 1942	23 Apr. 1943
McCord	17 Mar. 1942	10 Jan. 1943	19 Aug. 1943
McKee	2 Mar. 1942	1 Aug. 1942	31 Mar. 1943
Owen	17 Sep. 1942	21 Mar. 1943	20 Sep. 1943
Paul Hamilton	20 Jan. 1943	7 Apr. 1943	15 Nov. 1943
Prichett	20 July 1942	31 July 1943	15 Jan. 1944
Ringgold	25 June 1942	11 Nov. 1942	23 Dec. 1942
Robinson	12 Aug. 1942	28 Aug. 1943	31 Jan. 1944
Ross	7 Sep. 1942	10 Sep. 1943	21 Feb. 1944
Rowe	7 Dec. 1942	30 Sep. 1943	13 Mar. 1944
Schroeder	25 June 1942	11 Nov. 1942	31 Dec. 1942
Shields	10 Aug. 1943	25 Sep. 1944	22 Feb. 1945
Sigourney	7 Dec. 1942	24 Apr. 1943	29 June 1943
Sigsbee	22 July 1942	7 Dec. 1942	22 Jan. 1943
Smalley	9 Feb. 1943	27 Oct. 1943	31 Mar. 1944
Stanley	30 Dec. 1941	2 May 1942	15 Oct. 1942
Stembel	21 Dec. 1942	8 May 1943	16 July 1943
Stephen Potter	27 Oct. 1942	28 Apr. 1943	21 Oct. 1943
Stevens	30 Dec. 1941	24 June 1942	1 Feb. 1943
Stoddard	10 Mar. 1943	19 Nov. 1942	15 Apr. 1944
Terry	8 June 1942	22 Nov. 1942	26 Jan. 1943
The Sullivans	10 Oct. 1942	4 Apr. 1943	30 Sep. 1943
Tingey	22 Oct. 1942	28 May 1943	25 Nov. 1943
Trathen	18 July 1942	22 Oct. 1942	28 May 1943
Twinning	20 Nov. 1942	11 July 1942	1 Dec. 1943
Wadsworth	18 Aug. 1942	10 Jan. 1943	16 Mar. 1943
Watts	26 Mar. 1943	31 Dec. 1943	29 Apr. 1944
Wickes	15 Apr. 1943	13 Sep. 1943	16 June 1943
Wiley	10 Aug. 1943	25 Sep. 1944	14 Mar. 1945
Wren	24 Apr. 1943	29 Jan. 1944	20 May 1944
Yarnall	8 Dec. 1942	25 July 1943	30 Dec. 1943
Young	7 May 1943	11 Oct. 1942	31 July 1943

Appearance Notes.—All Bethlehem-built ships of this class have flat-sided funnels.

Conversion Notes.—Cowell, Daly, Isherwood, Hailey, Mullany, Ross, Rowe, Smalley and others have 4-5 inch (in "A," "B," "X" and "Y" positions), 6-3 inch (twin mounts in "Q" position, and two twins amidships between funnels), 5-21 inch (quintuple bank abaft after funnel) and tripod mast. The forward bank of tubes were suppressed (3 inch now mounted in their place). See photo of Ross. All active units rearmed, but over half the class are in reserve and mount their original armament.



# Escort Destroyers (DDE).

19 Converted "Fletcher" Class.



NICHOLAS (after conversion).

1953, U.S. Navy, Official.



NICHOLAS (before conversion).

1943, U.S. Navy, Official.

7 Bath Iron Works Corpn.

**DDE**  
507 CONWAY  
508 CONY  
510 EATON  
449 NICHOLAS  
450 O'BANNON  
468 TAYLOR  
517 WALKER

2 Bethlehem (Staten Island)

**DDE**  
470 BACHE  
471 BEALE

3 Consolidated Steel Corpn., Orange, Texas

570 CHARLES AUSBERNE  
576 MURRAY  
577 SPROSTON

7 Federal S.B. & D.D. Co.

**DDE**  
445 FLETCHER  
447 JENKINS  
498 PHILIP  
446 RADFORD  
499 RENSHAW  
465 SAUFLEY  
466 WALLER

Displacement : 2,050 tons standard (2,940 tons full load)  
Dimensions : 376½ (o.a.) × 39½ × 18 (max.) feet  
Guns : 2—5 inch, 38 cal., 4—3 inch, 50 cal. in twin mountings  
Tubes : 5—21 inch (quintupled)  
A/S weapons : 1 ahead throwing rocket launcher in place of "B" turret.  
Machinery : G.E. geared turbines. 2 shafts. S.H.P. : 60,000 = 35 kts.  
Boilers : 4 Babcock & Wilcox  
Complement : 300 (war)

General Notes.—Former destroyers (DD). Converted to serve as close-support convoy escorts. 9 under 1948 Programme, 3 under 1949 Programme, 6 under 1950 Programme, and Charles Ausberne under 1953 Programme. Jenkins does not carry any tubes. Anthony, DD 515, was also to have been converted, but is still a DD (see preceding page). Others may be converted later.

Name	Laid down	Launched	Completed	Name	Laid down	Launched	Completed
Bache	19 Nov. 1941	27 June 1942	14 Nov. 1942	O'Bannon	3 Mar. 1941	14 Mar. 1942	26 June 1942
Beale	19 Dec. 1941	25 Aug. 1942	23 Dec. 1942	Philip	7 May 1942	13 Oct. 1942	20 Nov. 1942
Charles Ausberne	14 May 1941	16 Mar. 1942	24 Nov. 1942	Radford	2 Oct. 1941	3 May 1942	21 July 1942
Conway	5 Nov. 1941	16 Aug. 1942	9 Oct. 1942	Renshaw	7 May 1942	13 Oct. 1942	4 Dec. 1942
Cony	24 Dec. 1941	16 Aug. 1942	30 Oct. 1942	Saufley	27 Jan. 1941	19 July 1942	28 Aug. 1942
Eaton	17 Mar. 1942	20 Sep. 1942	4 Dec. 1942	Sproston	1 Apr. 1942	31 Aug. 1942	18 May 1943
Fletcher	Oct. 1941	3 May 1942	30 June 1942	Taylor	28 Aug. 1941	7 June 1942	28 Aug. 1942
Jenkins	Nov. 1941	21 June 1942	31 July 1942	Walker	21 Aug. 1942	31 Jan. 1943	2 Apr. 1943
Murray	16 Mar. 1942	16 Aug. 1942	20 Apr. 1943	Waller	12 Feb. 1942	15 Aug. 1942	30 Sep. 1942
Nicholas	3 Mar. 1942	19 Feb. 1942	4 June 1942				



FLETCHER.

1954, U.S. Navy, Official.



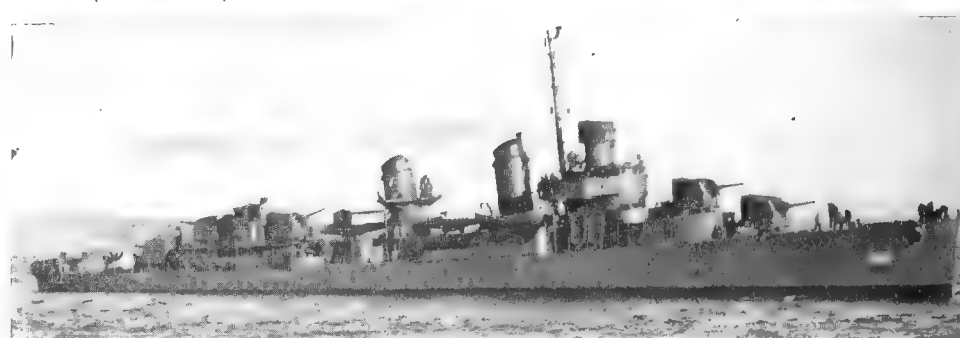
JENKINS.

1952, U.S. Navy, Official.



CONY (after conversion).

1952, U.S. Navy, Official.



CONY (before conversion).

1945, U.S. Navy, Official.

U.S.A.—Destroyers

Destroyers (DD).  
24 "Gleaves" Class.



WOOLSEY.

5 Bath Iron Works Corpn.

DD  
423 GLEAVES  
429 LIVERMORE (ex-Grayson)  
458 MACOMB  
424 NIBLACK  
437 WOOLSEY

1 Boston Navy Yard  
441 WILKES

3 Charleston Navy Yard  
435 GRAYSON  
443 SWANSON  
641 TILLMAN

10 Federal S.B. & D.D. Co.

DD  
439 EDISON  
619 EDWARDS  
454 ELLYSON  
440 ERICSSON  
432 KEARNEY  
623 NELSON  
431 PLUNKETT  
645 STEVENSON  
646 STOCKTON  
647 THORN

Added 1950, U.S. Navy, Official

1 Norfolk Navy Yard

DD  
638 HERNDON

4 Seattle-Tacoma S.B. Corpn., Seattle

624 BALDWIN  
497 FRANKFORD  
626 SATTERLEE  
628 WELLES

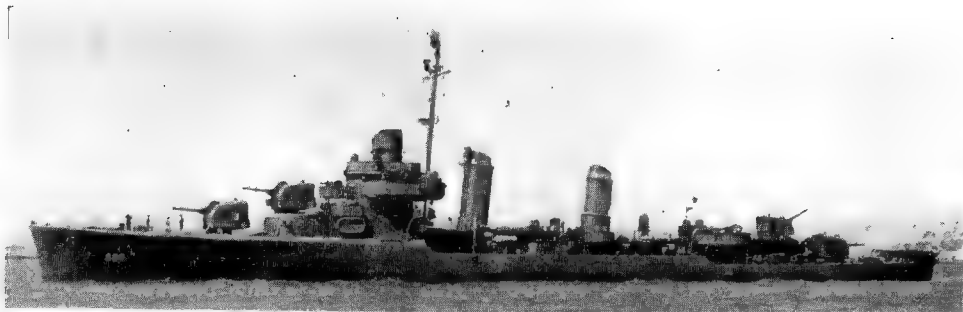
Displacement : 1,630 tons standard (2,450 tons full load)  
Dimensions : 341 (w.l.)  $34\frac{1}{2}$  (o.a.)  $\times$  36  $\times$  10 feet  
Guns : 4—5 inch, 38 cal., 4—40 mm. Bofors, 7—20 mm. Oerlikon  
Tubes : 5—21 inch  
Machinery : General Electric geared turbines. 2 shafts. S.H.P. : 50,000 = 36½ kts.  
Boilers : 4 Babcock & Wilcox  
Complement : 250 (war)

General Notes.—Laid down under the 1940-41 Programme. Cost averages \$3,814,000 per ship, inclusive. Carmick, Cowie, Davison, Doran, Doyle, Earle, Endicott, Fitch, Gheradi, Hambleton, Jeffers, Knight, McCook, Mervine, Quick, Rodman, Thompson, were fitted out as Fast Minesweepers and will be found on a later page. War losses: Aaron Ward, Beatty, Bristol, Corry, Duncan, Glennon, Gwin, Ingraham, Maddox, Meredith, Monssen, Turner. In addition, Shubrick was so badly damaged that she was scrapped. Most of remaining ships are laid up in reserve. Buchanan and McCalla transferred to Turkey 1949, Lansdowne and Lord 1950. Eberle and Ludlow transferred to Greece 1951. Nicholson transferred to Italy 1. 51. Ellyson and Macomb, formerly rated as high speed minesweepers, DMS 19 and DMS 23, respectively, were reclassified as destroyers DD 404 and DD 458, respectively in May 1954, and are being lent to the Japanese Navy.

Appearance Note.—Seattle-built ships of this class have square-faced bridges with director on bridge instead of mounted on a pedestal.

Name	Laid down	Launched	Completed	Name	Laid down	Launched	Completed
Baldwin	16 July 1941	1 June 1942	30 Apr. 1943	Nelson	7 May 1942	15 Sep. 1942	25 Nov. 1942
Edison	18 Mar. 1940	23 Nov. 1940	30 Jan. 1941	Niblack	8 Aug. 1938	18 May 1940	1 Aug. 1940
Edwards	1941	19 July 1942	17 Sep. 1942	Plunkett	1 Mar. 1939	9 Mar. 1940	16 July 1940
Ellyson	2 Dec. 1940	25 July 1941	28 Nov. 1941	Satterlee	10 Sep. 1941	17 July 1942	1 July 1943
Ericsson	18 Mar. 1940	23 Nov. 1940	11 Mar. 1941	Stevenson	23 July 1942	11 Nov. 1942	14 Dec. 1942
Frankford	June 1941	16 May 1942	31 Mar. 1943	Stockton	24 July 1942	11 Nov. 1942	9 Jan. 1943
Grayson	17 July 1939	7 Aug. 1940	15 Apr. 1941	Swanson	15 Nov. 1939	2 Nov. 1940	15 July 1941
Gleaves	16 May 1938	9 Dec. 1939	May 1940	Thorn	15 Nov. 1942	28 Feb. 1943	31 Mar. 1943
Herndon	26 Aug. 1941	5 Feb. 1942	20 Dec. 1942	Tillman	8 Sep. 1941	20 Dec. 1941	4 June 1942
Kearney	1 Mar. 1939	9 Mar. 1940	13 Sep. 1940	Welles	27 Sep. 1942	7 Sep. 1942	16 Aug. 1943
Livermore	6 Mar. 1939	3 Aug. 1940	7 Oct. 1940	Wilkes	1 Nov. 1939	31 May 1940	12 June 1941
Macomb	3 Sep. 1940	22 Sep. 1941	26 Jan. 1942	Woolsey	9 Oct. 1939	12 Feb. 1940	7 May 1941

Destroyers (DD).  
24 "Mayo" Class.



CALDWELL.

1951, U.S. Navy, Official.

6 Bethlehem (Quincy)

DD  
598 BANCROFT  
600 BOYLE  
601 CHAMPLIN  
422 MAYO  
616 NIELDS  
617 ORDONAU

4 Bethlehem (S. Pedro)

612 KENDRICK  
613 LAUB  
614 MACKENZIE  
615 McLANAHAN

Bethlehem (S. Francisco)

DD  
605 CALDWELL  
606 COGHLAN  
607 FRAZIER  
608 GANSEVOORT  
609 GILLESPIE  
610 HOBBY  
611 KALK

1 Boston Navy Yard

425 MADISON

5 Bethlehem (Staten Island)

DD  
492 BAILEY  
491 FARENHOLT  
602 MEADE  
603 MURPHY  
604 PARKER

1 Puget Sound Navy Yard

428 CHARLES F. HUGHES

Displacement 1,620 tons (2,450 tons full load)  
Dimensions : 348½ (o.a.)  $\times$  35½  $\times$  18 (max.) feet  
Guns : 4—5 inch, 38 cal., 4—40 mm. AA. ; 7—20 mm. AA.  
Tubes : 5—21 inch (quintupled) see notes.  
Machinery : Geared turbines. 2 shafts. S.H.P. : 50,000 = 36½ kts.  
Boilers : 4 high pressure  
Complement : 250

General Notes.—Built to the design of the Bethlehem Steel Co. War losses: Barton, Laffey, Lansdale. Woodworth transferred to Italy 1951 Benson and Hilary P. Jones were transferred to Nationalist China in 1954 (announced Nov. 1953).

Appearance Notes.—All ships of this class have flat-sided funnels. Reported some still have 10 torpedo tubes. Others have none.

Name	Laid down	Launched	Completed	Name	Laid down	Launched	Completed
Bailey	29 Jan. 1941	19 Dec. 1941	11 May 1942	Kalk	30 June 1941	18 July 1942	17 Oct. 1942
Bancroft	20 May 1941	31 Dec. 1941	30 Apr. 1942	Kendrick	1 May 1941	2 Apr. 1942	12 Sep. 1942
Boyle	31 Dec. 1941	15 June 1942	15 Aug. 1942	Laub	1 May 1941	1 June 1942	24 Oct. 1942
Caldwell	24 Mar. 1941	15 Jan. 1942	10 June 1942	McLanahan	29 May 1941	7 Sep. 1942	19 Dec. 1942
Champlin	31 Jan. 1942	25 July 1942	12 Sep. 1942	Mackenzie	1 May 1941	27 June 1942	21 Nov. 1942
Charles F. Hughes	3 Jan. 1939	16 May 1940	18 Oct. 1940	Madison	19 Dec. 1938	20 Oct. 1939	6 Dec. 1940
Coghlán	28 Mar. 1941	16 Feb. 1942	10 July 1942	Mayo	16 May 1938	26 Mar. 1940	18 Sep. 1940
Farenholt	11 Dec. 1940	19 Nov. 1941	2 Apr. 1942	Meade	25 Mar. 1941	15 Feb. 1942	22 June 1942
Frazier	5 July 1941	17 Mar. 1942	30 July 1942	Murphy	19 May 1941	29 Apr. 1942	25 July 1942
Gansevoort	16 June 1941	11 Apr. 1942	25 Aug. 1942	Nields	15 June 1942	1 Oct. 1942	15 Jan. 1943
Gillespie	16 June 1941	8 May 1942	16 Sep. 1942	Ordonaux	25 July 1942	9 Nov. 1942	13 Feb. 1943
Hobby	30 June 1941	4 June 1942	18 Nov. 1942	Parker	9 June 1941	12 May 1942	29 Aug. 1942

## Fast Light Minelayers (DM). Ex-Destroyers.

10 "Smith" Class.



HARRY F. BAUER.

1953, U.S. Navy, Official.



SHEA.

1953, P. Sweeney.

### DM

27 ADAMS (ex-DD 739)  
33 GWIN (ex-DD 772)  
26 HARRY F. BAUER (ex-DD 738)  
29 HENRY A. WILEY (ex-DD 749)

### DM

32 LINDSEY (ex-DD 771)  
23 ROBERT H. SMITH (ex-DD 735)  
25 SHANNON (ex-DD 737)

### DM

30 SHEA (ex-DD 750)  
24 THOMAS E. FRASER (ex-DD 736)  
28 TOLMAN (ex-DD 740)

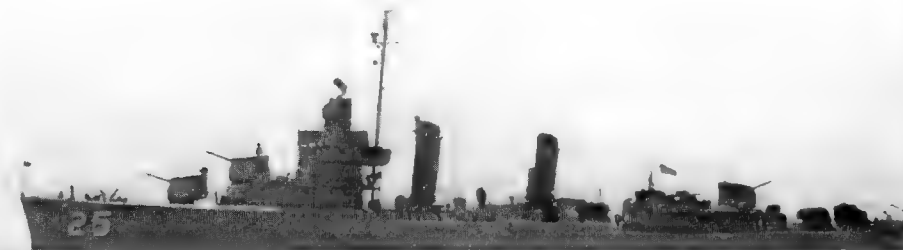
Displacement : 2,200 tons (3,000 tons full load)  
Dimensions :  $376\frac{1}{2} \times 41 \times 12\frac{1}{2}$  (mean) 19 (max.) feet  
Guns : 6—5 inch, 38 cal., 12—40 mm. AA., 11—20 mm. AA.  
(All active units rearmed with 6—3 inch, 50 cal. in place of 40 mm.)  
Machinery : Geared turbines, 2 shafts. S.H.P. : 60,000 = 34 kts.  
Boilers : 4 Babcock & Wilcox  
Complement : 350

Notes.—Modified Destroyers of "Allen M. Sumner" class. DM 23-28 built by Bath Iron Works, DM 29, 30 by Bethlehem Steel Co Staten Island, N.Y., and DM 32-33 by Bethlehem Steel Co., San Pedro, California. Being fitted with tripod masts. J. Wm. Ditter DM 31, and Aaron Ward, DM 24, scrapped.

Name	Launched	Completed	Name	Launched	Completed
Adams	23 July 1944	10 Oct. 1944	Robert H. Smith	25 May 1944	4 Aug. 1944
Gwin	9 Apr. 1944	30 Sep. 1944	Shannon	24 June 1944	8 Sep. 1944
Harry F. Bauer	9 July 1944	22 Sep. 1944	Shea	20 May 1944	30 Sep. 1944
Henry A. Wiley	21 Apr. 1944	31 Aug. 1944	Thomas E. Fraser	10 June 1944	22 Aug. 1944
Lindsey	5 Mar. 1944	20 Aug. 1944	Tolman	13 Aug. 1944	27 Oct. 1944

## Large High-Speed Minesweepers (DMS). Ex-Destroyers.

17 "Hambleton" Class.



FITCH.

1952, Harvey Gilston, Esq.



RODMAN.

1951, U.S. Navy, Official.

### DMS

33 CARMICK (ex-DD 493)  
39 COWIE (ex-DD 632)  
37 DAVISON (ex-DD 618)  
41 DORAN (ex-DD 634)  
34 DOYLE (ex-DD 494)  
42 EARLE (ex-DD 635)

### DMS

35 ENDICOTT (ex-DD 495)  
25 FITCH (ex-DD 462)  
30 GHERARDI (ex-DD 637)  
20 HAMBLETON (ex-DD 455)  
27 JEFFERS (ex-DD 621)

### DMS

40 KNIGHT (ex-DD 633)  
36 MCCOOK (ex-DD 496)  
31 MERVINE (ex-DD 489)  
32 QUICK (ex-DD 490)  
21 RODMAN (ex-DD 456)  
38 THOMPSON (ex-DD 627)

Displacement : 1,630 tons (2,575 tons full load)  
Dimensions :  $341$  (w.l.),  $348\frac{1}{2}$  (o.a.)  $\times 36 \times 10$  (mean) 18 (max.) feet  
Guns : 3—5 inch, 38 cal., 4—40 mm. AA., 4 to 5—20 mm. AA.  
Machinery : Geared turbines, 2 shafts. S.H.P. : 50,000 = 37 kts.  
Boilers : 4 Babcock & Wilcox  
Complement : 250

Notes.—Modified Destroyers of "Gleaves" class. DMS 20, 21, 27, 37 built by Federal S.B. & D.D. Co., DMS 25, 39-42 by Boston Navy Yard, DMS 31-36, 38 by Seattle-Tacoma S.B. Corp'n. Butler, Forrest and Harding scrapped. Hobson, DMS 26, sank in mid-Atlantic, 27 April, 1952, after collision with the aircraft carrier Wasp during a night exercise. Ellyson, DMS 19, and Macomb, DMS 23, were reclassified as destroyers DD 454 and DD 458, respectively, in May 1954 (see "Gleaves" class, preceding page). Second World War loss : Emmons.

Name	Laid down	Launched	Completed	Name	Laid down	Launched	Completed
Carmick	29 May 1941	8 Mar. 1942	28 Dec. 1942	Hambleton	16 Dec. 1940	26 Sep. 1941	22 Dec. 1941
Cowie	18 Mar. 1941	27 Sep. 1941	1 June 1942	Jeffers	25 Mar. 1942	26 Aug. 1942	4 Nov. 1942
Davison	26 Feb. 1942	19 July 1942	11 Sep. 1942	Knight	18 Mar. 1941	27 Sep. 1941	23 June 1942
Doran	14 June 1941	10 Dec. 1941	4 Aug. 1942	McCook	1 May 1941	3 May 1942	15 Mar. 1943
Doyle	29 May 1941	17 Mar. 1942	27 Jan. 1943	Mervine	3 Nov. 1941	3 May 1942	16 June 1942
Earle	14 June 1941	10 Dec. 1941	1 Sep. 1942	Quick	3 Nov. 1941	3 May 1942	2 July 1942
Endicott	1 May 1941	5 Apr. 1942	25 Feb. 1943	Rodman	16 Dec. 1940	26 Sep. 1941	27 Jan. 1942
Fitch	6 Jan. 1941	14 June 1941	3 Feb. 1942	Thompson	22 Sep. 1941	10 Aug. 1942	10 July 1943
Gerhardi	16 Sep. 1941	12 Feb. 1942	15 Sep. 1942				

U.S.A.—Patrol Vessels

Rated as Escort Vessels (DE).

General Notes.—Former Destroyer Escorts are now officially grouped under the generic heading of Patrol Vessels with the specific classification of Escort Vessels, but they approximate to the Frigate category in British and other navies.

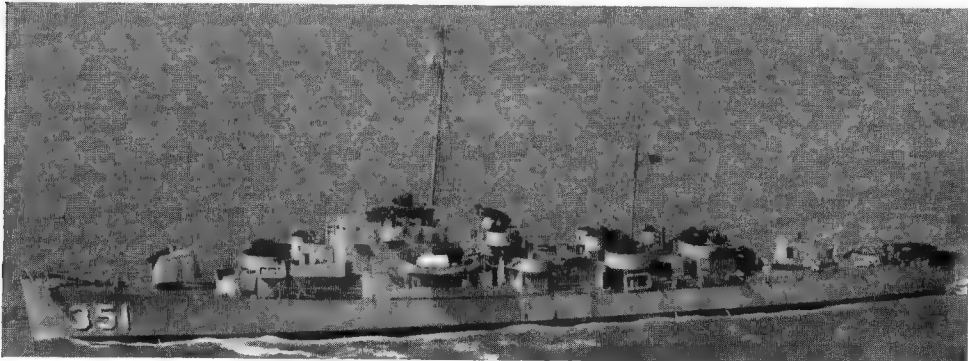
13 Ocean Escort (A/S Frigate) Type. New Construction.

3 Bath Iron Works

2 Defoe S.B. Co.

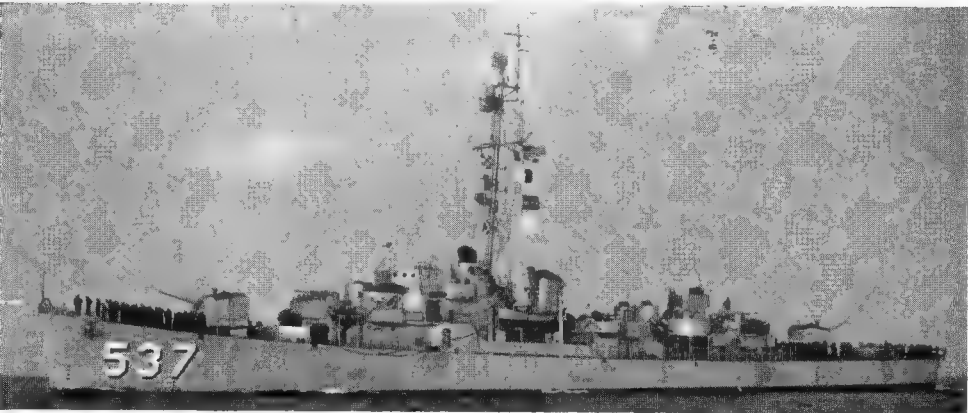
DE	DE	DE
1006 DEALEY (8 Nov. 1953)	1014 CROMWELL (4 June 1954)	1021
	1015 HAMMERBERG (20 Aug. 1954)	1022
Displacement :	1,450 tons standard (1,914 to 1,930 tons full load)	
Dimensions :	314½ × 36½ × 18 feet	
Machinery :	Turbine. 1 shaft. S.H.P. : 20,000 = 25 kts.	
Boilers :	2	

Notes.—Dealey laid down 15 Oct. 1952, Cromwell 3 Aug. 1953, Hammerberg 12 Nov. 1953, officially described as prototype for new and modern anti-submarine vessels. The first estimated cost was \$15,000,000 per vessel. To be lavishly equipped with electronic gear. Two (DE 1014, 1015) provided under 1952-53 programme. Designed specifically for fast convoy work and will be constructed in such a manner that in the event of war similar DEs could be built rapidly. In March 1954 Defoe Shipbuilding Co., Bay City, Mich. were awarded \$13,972,418 contract for 2 escort vessels (DE) of "Dealey" class, single screw, all aluminium superstructure saving 40 per cent. in weight. 8 new DEs requested in 1955 fiscal appropriations.



MAURICE J. MANUEL (see next page)

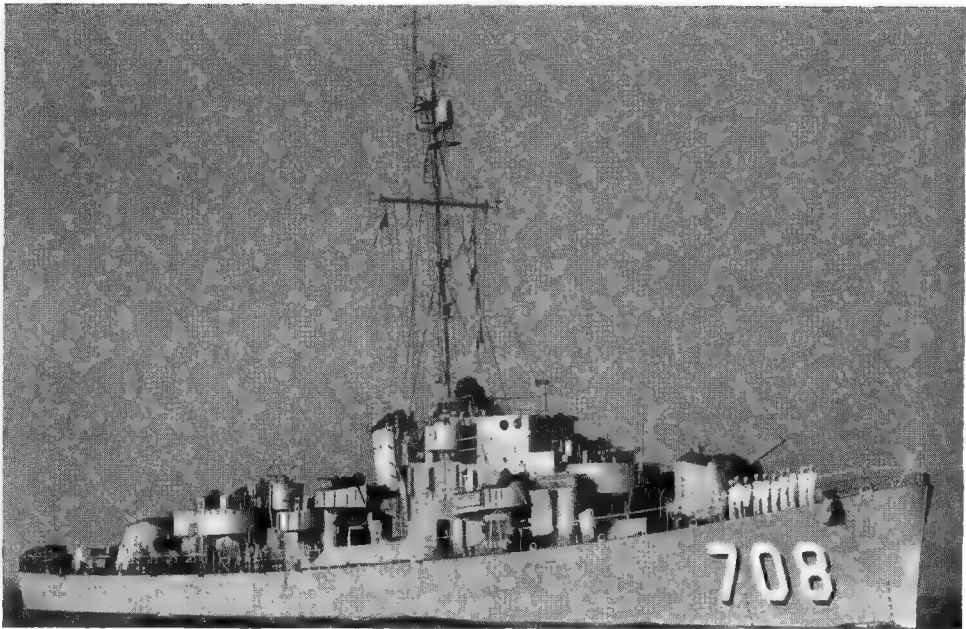
1954, Skyfotos.



RIZZI (see next page)

1954, Wright & Logan.

20 "Rudderow" Class.



PARLE.

1954, U.S. Navy, Official.

11 Bethlehem-Hingham

3 Bethlehem, Quincy

3 Defoe Co., Bay City

DE	DE	DE	DE
584 CHARLES J. KIMMEL	581 McNULTY	685 COATES	706 HOLT
585 DANIEL A. JOY	582 METIVIER	684 DE LONG	707 JOBB
583 GEORGE A. JOHNSON	588 PEIFFER	686 EUGENE E. ELMORE	708 PARLE
580 LESLIE L. B. KNOX	579 RILEY		
586 LOUGH	587 THOMAS F. NICKEL	1 Charleston Navy Yard	2 Philadelphia Navy Yard
	589 TINSMAN	231 HODGES	225 DAY
			224 RUDDEROW

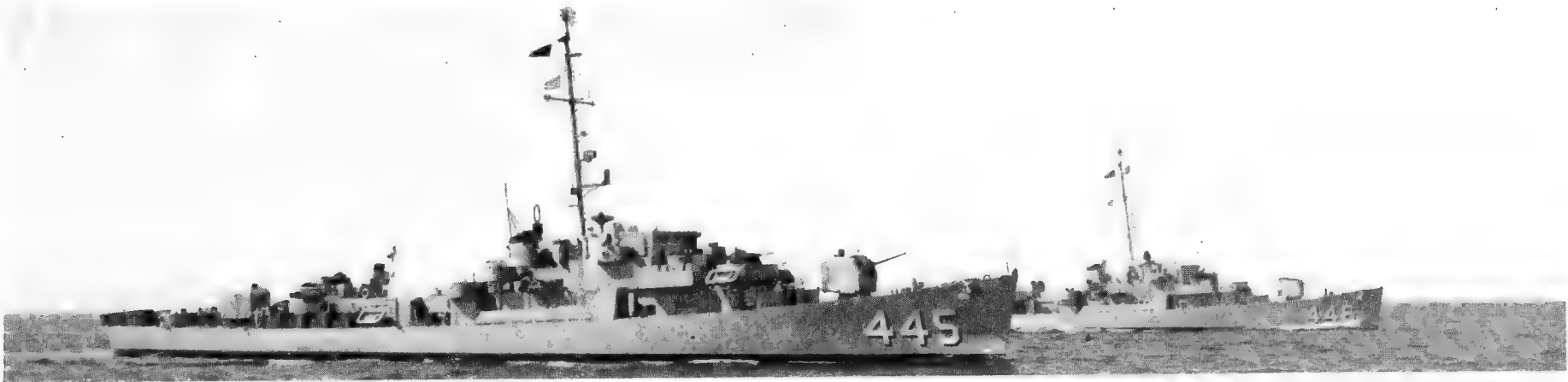
Displacement : 1,450 tons standard (2,230 tons full load)  
Dimensions : 306 (o.a.) × 36½ × 14 (max.) feet  
Guns : 2—5 inch, 38 cal., 2—40 mm., 6—20 mm.  
Machinery : Turbo-electric propulsion. 2 shafts. S.H.P. : 12,000 = 24 kts.  
Complement : 220 (war)

Notes.—62 ships of this type were built. Originally rated as Destroyer Escorts (DE) but now grouped under Patrol Vessels (Escort Vessels). Chaffee (DE 230) scrapped. DE 226-229, 232-237, 590-606, 687-692, 710-722 were converted into Fast Transports (APD).

Name	Launched	Completed	Name	Launched	Completed
Charles H. Kimmel	15 Jan. 1944	20 Apr. 1944	Leslie L. B. Knox	8 Jan. 1944	22 Mar. 1944
Coates	9 Dec. 1943	24 Jan. 1944	Lough	22 Jan. 1944	2 May 1944
Daniel A. Joy	15 Jan. 1944	28 Apr. 1944	McNulty	8 Jan. 1944	31 Mar. 1944
De Long	23 Nov. 1943	31 Dec. 1943	Metivier	12 Jan. 1944	7 Apr. 1944
Day	14 Oct. 1943	10 June 1944	Parle	25 Mar. 1944	29 July 1944
Eugene E. Elmore	23 Dec. 1943	4 Feb. 1944	Peiffer	26 Jan. 1944	15 June 1944
George A. Johnson	21 Jan. 1944	15 Apr. 1944	Riley	29 Dec. 1943	13 Mar. 1944
Hodges	9 Dec. 1943	27 May 1944	Rudderow	14 Oct. 1943	15 May 1944
Holt	15 Dec. 1943	9 June 1944	Thomas F. Nickel	22 Jan. 1944	9 June 1944
Jobb	4 Mar. 1944	4 July 1944	Tinsman	29 Jan. 1944	26 June 1944

Rated as **Escort Vessels (DE).**

77 “ John C. Butler ” Class.



GRADY (foreground) and CHARLES E. BRANNON.

Added 1952, Official United States Navy Photo.

8 Boston Naval Shipyard  
**DE**  
536 BIVIN  
531 EDWARD H. ALLEN  
533 HOWARD F. CLARK  
**A/S** 535 LEWIS  
538 OSBERG  
537 RIZZI  
534 SILVERSTEIN  
**A/S** 532 TWEEDY

**DE**  
408 STRAUS  
418 TABBERER  
412 WALTER C. WANN  
33 Consolidated Steel Corp., Orange  
343 ABERCROMBIE  
366 ALVIN C. COCKRELL  
368 CECIL J. DOYLE  
353 DOYLE C. BARNES  
346 EDWIN A. HOWARD  
367 FRENCH  
349 GENTRY  
357 GEORGE E. DAVIS  
355 JACCARD  
347 JESSE RUTHERFORD  
339 JOHN C. BUTLER  
370 JOHN L. WILLIAMSON  
360 JOHNNIE HUTCHINS  
354 KENNETH M. WILLETT  
348 KEY  
356 LLOYD E. ACREE  
365 MCGINTY  
358 MACK  
351 MAURICE J. MANUEL  
352 NAIFEH  
340 O'FLAHERTY  
363 PRATT  
371 PRESLEY

Displacement : 1,350 tons (2,100 tons full load)  
Dimensions : 306 (o.a.) x 36½ x 11 (max.) feet  
Guns : 2—5 inch, 38 cal., 2—40 mm. AA., and D.C.T.  
Tubes : Removed  
Machinery : Geared turbines, 2 shafts. S.H.P. : 12,000 = 24 kts.  
Complement : 220 (war)

Notes.—Originally rated as Destroyer Escorts (DE). Two ships marked A/S, Lewis and Tweedy, converted to DE (A/S). Oswald A. Powers and Sheehan have been scrapped. War losses: Evansole, Oberlander, Samuel B. Roberts, Shelton.

Completion of Yandivier and Wagner of this class was suspended in Aug. 1946 ; but under the 1954 fiscal year conversion programme these two ships are to be completed as radar picket escort vessels (DER) at Boston Naval Shipyard. See page 420.

**DE**  
341 RAYMOND  
342 RICHARD W. SUESENS  
345 ROBERT BRAZIER  
362 ROLF  
364 ROMBACH  
369 THADDEUS PARKER  
350 TRAW  
361 WALTON  
372 WILLIAMS  
359 WOODSON  
16 Federal S.B. & D.D. Co., Port Newark  
447 ALBERT T. HARRIS  
446 CHARLES E. BRANNON  
439 CONKLIN  
438 CORBESIER  
448 CROSS  
509 FORMOE  
508 GILLIGAN  
444 GOSS  
445 GRADY  
449 HANNA  
510 HEYLIGER  
443 KENDALL C. CAMPBELL  
450 JOSEPH E. CONNOLLY  
440 MCCOY REYNOLDS  
442 ULVERT M. MOORE  
441 WILLIAM SEIVERLING

Name	Launched	Completed
Abercrombie	14 Jan. 1944	1 May 1944
Albert T. Harris	16 Apr. 1944	29 Nov. 1944
Alvin C. Cockrell	8 Aug. 1944	7 Oct. 1944
Bivin	7 Dec. 1943	31 Oct. 1944
Cecil J. Doyle	1 July 1944	16 Oct. 1944
Charles E. Brannon	23 Apr. 1944	1 Nov. 1944
Chester T. O'Brien	29 Feb. 1944	3 July 1944
Conklin	13 Feb. 1944	21 Apr. 1944
Corbesier	13 Feb. 1944	31 Mar. 1944
Cross	4 July 1944	8 Jan. 1945
Dennis	4 Dec. 1943	20 Mar. 1944
Douglas A. Munro	8 Mar. 1944	11 July 1945
Doyle C. Barnes	4 Mar. 1944	13 July 1944
DuFilho	9 Mar. 1944	21 July 1944
Edmonds	17 Dec. 1943	3 Apr. 1944
Edward H. Allen	17 Oct. 1943	16 Dec. 1943
Edwin A. Howard	25 Jan. 1944	25 May 1944
Formoe	2 Apr. 1944	5 Oct. 1944
French	17 June 1944	9 Oct. 1944
Gentry	15 Feb. 1944	14 June 1944
George E. Davis	8 Apr. 1944	11 Aug. 1944
Gilligan	22 Feb. 1944	12 May 1944
Goss	19 Mar. 1944	26 Aug. 1944
Grady	2 Apr. 1944	11 Sep. 1944
Haas	20 Mar. 1944	2 Aug. 1944
Hanna	4 July 1944	27 Jan. 1945
Howard F. Clark	8 Nov. 1943	25 May 1944
Heyliger	6 Aug. 1944	24 Mar. 1945
Jaccard	18 Mar. 1944	26 July 1944
Jack Miller	10 Jan. 1944	13 Apr. 1944
Jesse Rutherford	29 Jan. 1944	31 May 1944
John C. Butler	11 Dec. 1943	31 Mar. 1944
John L. Williamson	29 Aug. 1944	31 Oct. 1944
Johnnie Hutchins	2 May 1944	28 Aug. 1944
Joseph E. Connolly	6 Aug. 1944	28 Feb. 1945
Kendall C. Campbell	19 Mar. 1944	31 July 1944
Kenneth M. Willett	7 May 1944	19 July 1944
Key	12 Feb. 1944	5 June 1944
La Prade	31 Dec. 1943	20 Apr. 1944

Name	Launched	Completed
Lawrence C. Taylor	29 Jan. 1944	13 May 1944
Le Ray Wilson	28 Jan. 1944	10 May 1944
Leland E. Thomas	28 Feb. 1944	19 June 1944
Lewis	7 Dec. 1943	5 Sep. 1944
Lloyd E. Acree	21 Mar. 1944	1 Aug. 1944
Mack	11 Apr. 1944	16 Aug. 1944
Maurice J. Manuel	19 Feb. 1944	30 June 1944
Melvin R. Nawman	7 Feb. 1944	16 May 1944
McCoy Reynolds	22 Feb. 1944	2 May 1944
McGinty	5 Aug. 1944	25 Sep. 1944
Naifeh	29 Feb. 1944	4 July 1944
O'Flaherty	14 Dec. 1943	8 Apr. 1944
Oliver Mitchell	8 Feb. 1944	14 June 1944
Osberg	7 Dec. 1943	17 Dec. 1945
Pratt	1 June 1944	18 Sep. 1944
Presley	19 Aug. 1944	7 Nov. 1944
Raymond	8 Jan. 1944	15 Apr. 1944
Richard M. Rowell	17 Nov. 1943	9 Mar. 1944
Richard S. Bull	16 Nov. 1943	26 Feb. 1944
Richard W. Suesens	11 Jan. 1944	26 Apr. 1944
Rizzi	7 Dec. 1943	30 June 1945
Robert Brazier	22 Jan. 1944	18 May 1944
Robert F. Keller	11 Feb. 1944	17 June 1944
Rolf	23 May 1944	7 Sep. 1944
Rombach	6 June 1944	20 Sep. 1944
Silverstein	8 Nov. 1943	14 July 1944
Stafford	11 Jan. 1944	19 Apr. 1944
Strauss	30 Dec. 1943	6 Apr. 1944
Tabberer	18 Feb. 1944	23 May 1944
Thaddeus Parker	26 Aug. 1944	25 Oct. 1944
Traw	14 Feb. 1944	20 June 1944
Tweedy	7 Oct. 1943	12 Feb. 1944
Ulvert M. Moore	7 Mar. 1944	18 July 1944
Walter C. Wann	19 Jan. 1944	2 May 1944
Walton	20 May 1944	4 Sep. 1944
William Seiverling	7 Mar. 1944	1 June 1944
Williams	22 Aug. 1944	11 Nov. 1944
Woodson	29 Apr. 1944	24 Aug. 1944



U.S.A.—Patrol Vessels

Rated as **Escort Vessels (DE)**

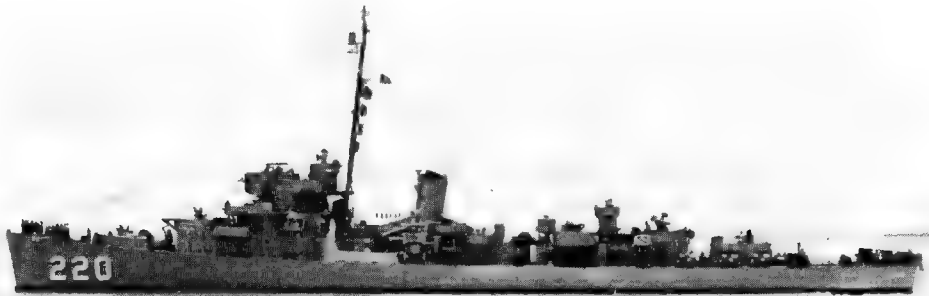
50 “Buckley” Class.

2 Bethlehem-Hingham	6 Charleston Navy Yard	DE
DE	DE	697 GEORGE
575 AHRENS	202 EICHENBERGER	703 HOLTON
59 FOSS	201 JAMES E. CRAIG	699 MARSH
	199 MANNING	701 OSMUS
5 Bethlehem, Quincy	200 NEUENDORF	C 698 RABY
681 GILLETTE	210 OTTER	696 SPANGLER
679 GREENWOOD	203 THOMASON	
678 HARMON	8 Consolidated Steel Corp., Orange	3 Dravo Corp., Pittsburgh
683 HENRY R. KENYON	790 BORUM	666 DURIK
680 LOESER	795 GUNASON	665 JENKS
	800 JACK W. WILKE	667 WISEMAN
9 Bethlehem, S. Francisco	796 MAJOR	
643 DAMON M. CUMMINGS	791 MALOY	1 Norfolk Navy Yard
640 FIEBERLING	799 SCROGGINS	198 LOVELACE
633 FOREMAN	798 VARIAN	
639 GENDREAU	797 WEEDEN	6 Philadelphia Navy Yard
642 PAUL G. BAKER	10 Defoe Co., Bay City, Mich.	217 COOLBAUGH
A/S 644 VAMMEN	C 704 CRONIN	218 DARBY
634 WHITEHURST	700 CURRIER	222 FOWLER
641 WILLIAM C. COLE	702 EARL V. JOHNSON	220 FRANCIS M. ROBINSON
638 WILLMARTH	C 705 FRYBARGER	219 J. DOUGLAS BLACKWOOD
		214 SCOTT

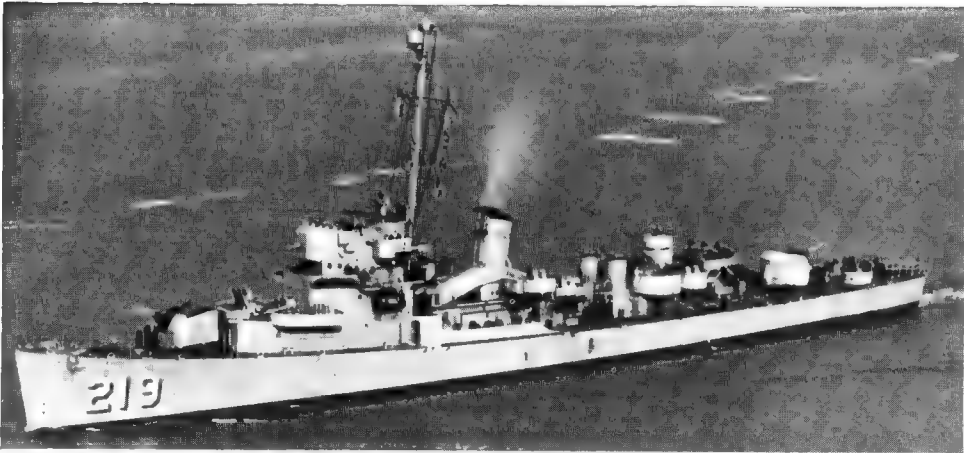
Displacement :	1,400 tons (2,170 tons full load)
Dimensions :	306 (o.a.) × 36½ × 10½ (mean) 14 (max.) feet
Guns :	3—3 inch, 50 cal. (Coolbaugh, Darby, J. Douglas Blackwood, Raby 2—5 inch, 38 cal. d.p.)—see Gunnery Notes, 8—40 mm. AA., 4—20 mm. AA., and D.C.T.
Tubes :	Removed
Machinery :	Turbo-electric, 2 shafts. S.H.P. : 12,000 = 24 kts.
Oil fuel :	340 tons
Complement :	220 (war)

General Notes.—46 ships of this class, originally rated as Destroyer Escorts (DE), were transferred under Lend-Lease scheme to Royal Navy in which they served as frigates. Six of these were lost, and the remainder were returned to U.S.A. for scrapping. Fifty more of “Buckley” class were adapted for duty as Fast Transports or for subsidiary purposes. Foss, Marsh and others rigged as power supply ships have two large reels for power cables amidships. Fechteler and Underhill were lost in the Second World War. Solar was destroyed by internal explosion, April 30, 1946.

Name	Launched	Completed	Name	Launched	Completed
Ahrens	21 Dec. 1943	12 Feb. 1944	James E. Craig	22 July 1943	1 Nov. 1943
Borum	14 Aug. 1943	30 Nov. 1943	J. Douglas Blackwood	29 May 1943	15 Jan. 1943
Coolbaugh	29 May 1943	15 Oct. 1943	Jenks	11 Sep. 1943	19 Jan. 1944
Cronin	5 Jan. 1944	4 May 1944	Loeser	11 Sep. 1943	10 Oct. 1943
Currier	14 Oct. 1943	1 Feb. 1944	Lovelace	4 July 1943	7 Nov. 1943
Damon M. Cummings	18 April 1944	29 June 1944	Major	23 Oct. 1943	12 Feb. 1944
Darby	29 May 1943	15 Nov. 1943	Maloy	18 Aug. 1943	13 Dec. 1943
Durik	9 Oct. 1943	24 Mar. 1944	Manning	1 Sept. 1943	1 Oct. 1943
Earl V. Johnson	12 Jan. 1944	18 Mar. 1944	Marsh	29 Jan. 1943	12 Jan. 1944
Eichenberger	22 July 1943	17 Nov. 1943	Neuendorf	18 Sept. 1943	18 Oct. 1943
Fieberling	2 Mar. 1944	11 Apr. 1944	Osmus	4 Nov. 1943	23 Feb. 1944
Foreman	1 Aug. 1943	22 Oct. 1943	Otter	23 Oct. 1943	21 Feb. 1944
Foss	10 Apr. 1943	23 July 1943	Paul G. Baker	12 Mar. 1944	25 May 1944
Fowler	3 July 1943	15 Mar. 1944	Raby	4 Sep. 1943	7 Dec. 1943
Francis M. Robinson	29 May 1943	15 Jan. 1944	Scott	3 Apr. 1943	20 July 1943
Frybarger	25 Jan. 1944	18 May 1944	Scroggins	6 Nov. 1943	30 Mar. 1944
George	16 Feb. 1943	20 Nov. 1943	Spanglar	15 July 1943	31 Oct. 1943
Gendreau	12 Dec. 1943	17 Mar. 1944	Thomason	24 Aug. 1943	10 Dec. 1943
Gillette	25 Sep. 1943	27 Oct. 1943	Varian	6 Nov. 1943	29 Feb. 1944
Greenwood	21 Aug. 1943	25 Sep. 1943	Vammen	21 May 1944	27 July 1944
Gunason	17 Oct. 1943	1 Feb. 1944	Weeden	27 Oct. 1943	19 Feb. 1944
Harmon	25 July 1943	31 Aug. 1943	Whitehurst	5 Sep. 1943	19 Nov. 1943
Henry R. Kenyon	30 Oct. 1943	30 Nov. 1943	William C. Cole	28 Dec. 1943	12 May 1944
Holton	15 Dec. 1943	1 May 1944	Willmarth	21 Nov. 1943	13 Mar. 1944
Jack W. Wilke	18 Dec. 1943	7 Mar. 1944	Wiseman	6 Nov. 1943	4 Apr. 1944



FRANCIS M. ROBINSON (3-inch gunned type). 1953, U.S. Navy, Official.



J. DOUGLAS BLACKWOOD (5-inch gunned type). 1952, U.S. Naval Academy,

Gunnery Notes.—Ten DE's of this class have 5-inch guns (see photo).

A/S Vammen to convert to DE (A/S), i.e., for anti-submarine warfare.  
C Cronin, Frybarger and Raby redesignated DEC (escort vessels, control) on reassignment to amphibious forces ; but Cronin and Raby were decommissioned Oct. 1953 to Reserve Fleet.

Rated as **Escort Vessels (DE)**.

71 "Edsall" Class.

33 Brown S.B. Co., Houston	DE	38 Consolidated Steel Corpn.	DE
390 <b>CALCATERRA</b>	DE	147 <b>BLAIR</b>	130 <b>JACOB JONES</b>
251 <b>CAMP</b>	253 <b>PETTIT</b>	327 <b>BRISTER</b>	140 <b>J. R. Y. BLAKELEY</b>
391 <b>CHAMBERS</b>	382 <b>RAMSDEN</b>	148 <b>BROUGH</b>	331 <b>KOINER</b>
398 <b>COCKRILL</b>	384 <b>RHODES</b>	149 <b>CHATELAIN</b>	329 <b>KRETCHMER</b>
389 <b>DURANT</b>	385 <b>RICHEY</b>	337 <b>DALE W. PETERSON</b>	325 <b>LOWE</b>
400 <b>HISSEM</b>	254 <b>RICKETTS</b>	335 <b>DANIEL</b>	338 <b>MARTIN H. RAY</b>
252 <b>HOWARD D. CROW</b>	255 <b>SELLSTROM</b>	138 <b>DOUGLAS L. HOWARD</b>	320 <b>MENGES</b>
250 <b>HURST</b>	245 <b>SLOAT</b>	129 <b>EDSALL</b>	231 <b>MOSLEY</b>
396 <b>JANSSEN</b>	246 <b>SNOWDEN</b>	324 <b>FALGOUT</b>	150 <b>NEUNZER</b>
243 <b>J. RICHARD WARD</b>	247 <b>STANTON</b>	139 <b>FARQUHAR</b>	322 <b>NEWELL</b>
241 <b>KEITH</b>	238 <b>STEWART</b>	328 <b>FINCH</b>	330 <b>O'REILLY</b>
388 <b>LANCING</b>	399 <b>STOCKDALE</b>	135 <b>FLAHERTY</b>	A S 152 <b>PETERSON</b>
249 <b>MARCHAND</b>	239 <b>STURTEVANT</b>	334 <b>FORSTER</b>	151 <b>POOLE</b>
392 <b>MERRILL</b>	248 <b>SWASEY</b>	144 <b>FROST</b>	134 <b>POPE</b>
GT 383 <b>MILLS</b>	394 <b>SWENNING</b>	131 <b>HAMMAN (ex-Langley)</b>	332 <b>PRICE</b>
	242 <b>TOMICH</b>	137 <b>HERBERT C. JONES</b>	323 <b>PRIDE</b>
	387 <b>VANCE</b>	141 <b>HILL</b>	132 <b>ROBERT E. PEARY</b>
	395 <b>WILLIS</b>	145 <b>HUSE</b>	336 <b>ROY O. HALE</b>
		146 <b>INCH</b>	326 <b>THOMAS J. GARY</b>

Displacement : 1,200 tons (1,850 tons full load)  
Dimensions : 306 (o.a.) x 36½ x 11 (max.) feet  
Guns : 3—3 inch, 50 cal. (Camp, 2—5 inch, 38 cal., d.p.). 8—40 mm. AA., 4—20 mm. AA. and D.C.T.  
Tubes : Removed  
Machinery : Fairbanks-Morse Diesels. 2 shafts. B.H.P. : 6,000 = 21 kts.  
Complement : 220 (war)

Note.—Fessenden, Harveson, Joyce, Kirkpatrick, Otterstetter and Strickland of this class converted to DER (Radar Picket Escort Vessels) Haverfield, Pillsbury, Savage, Wilhoite are being converted to DER, see next page. Falgout, Finch, Forster, Koiner, Lowe and Newell, transferred to United States Coast Guard 1951, Chambers, Durant, Lansing, Ramsden, Richey, Vance, 1952, were returned to U.S. Navy 1954. War losses : Fiske, Frederick C. Davis, Holder, Leopold.  
A/S Petersen has been converted to DE(A/S), i.e., for specialised anti-submarine warfare (recommissioned 1 May 1952).

Name	Launched	Completed	Name	Launched	Completed
Blair	6 Apr. 1943	13 Sep. 1943	Marchand	20 Mar. 1943	8 Sep. 1943
Brister	24 Aug. 1943	30 Nov. 1943	Martin H. Ray	29 Dec. 1943	28 Feb. 1944
Brough	10 Apr. 1943	18 Sep. 1943	Menges	15 June 1943	26 Oct. 1943
Calcaterra	16 Aug. 1943	17 Nov. 1943	Merrill	29 Aug. 1943	27 Nov. 1943
Camp	16 Apr. 1943	16 Sep. 1943	Mills	26 May 1943	12 Oct. 1943
Chambers	17 Aug. 1943	22 Nov. 1943	Moore	21 Dec. 1942	1 July 1943
Chatelain	21 Aug. 1943	22 Sep. 1943	Mosley	26 June 1943	30 Oct. 1943
Cockrill	29 Oct. 1943	24 Dec. 1943	Neunzer	27 Apr. 1943	27 Sep. 1943
Dale W. Petersen	22 Dec. 1943	17 Feb. 1944	Newell	29 June 1943	30 Oct. 1943
Daniel	16 Nov. 1943	24 Jan. 1944	O'Reilly	2 Sep. 1943	28 Dec. 1943
Douglas L. Howard	25 Jan. 1943	29 July 1943	Petersen	15 May 1943	28 Sep. 1943
Durant	3 Aug. 1943	16 Nov. 1943	Pettit	28 Apr. 1943	23 Sep. 1943
Edsall	1 Nov. 1942	10 Apr. 1943	Poole	8 May 1943	29 Sep. 1943
Falgout	24 July 1943	15 Nov. 1943	Pope	12 Jan. 1943	25 June 1943
Farquhar	13 Feb. 1943	5 Aug. 1943	Price	30 Oct. 1943	12 Jan. 1944
Finch	28 Aug. 1943	13 Dec. 1943	Pride	3 July 1943	13 Nov. 1943
Flaherty	17 Jan. 1943	26 June 1943	Ramsden	24 May 1943	19 Oct. 1943
Forster	13 Nov. 1943	25 Jan. 1944	Rhodes	29 June 1943	25 Oct. 1943
Frost	13 Mar. 1943	30 Aug. 1943	Richey	20 June 1943	30 Oct. 1943
Hamman	19 Dec. 1942	17 May 1943	Ricketts	10 May 1943	5 Oct. 1943
Herbert C. Jones	19 Jan. 1943	21 July 1943	Robert E. Peary	3 Jan. 1943	31 May 1943
Hill	28 Feb. 1943	16 Aug. 1943	Roy O. Hale	20 Nov. 1943	3 Feb. 1944
Hissem	26 Dec. 1943	13 Jan. 1944	Sellstrom	12 May 1943	12 Oct. 1943
Howard D. Crow	14 Apr. 1943	27 Sep. 1943	Sloat	21 Jan. 1943	16 Aug. 1943
Hurst	14 Apr. 1943	30 Aug. 1943	Snowden	19 Feb. 1943	23 Aug. 1943
Huse	23 Mar. 1943	30 Aug. 1943	Stanton	28 Feb. 1943	7 Aug. 1943
Inch	4 Apr. 1943	8 Sep. 1943	Stewart	22 Nov. 1942	31 May 1943
Jacob Jones	29 Nov. 1942	29 Apr. 1943	Stockdale	30 Oct. 1943	31 Dec. 1943
Janssen	10 Oct. 1943	18 Dec. 1943	Sturtevant	3 Dec. 1942	16 June 1943
J. Richard Ward	6 Jan. 1943	5 July 1943	Swasey	18 Mar. 1943	31 Aug. 1943
J. R. Y. Blakeley	7 Mar. 1943	16 Aug. 1943	Swenning	13 Sep. 1943	1 Dec. 1943
Keith	21 Dec. 1942	19 July 1943	Thomas J. Gary	21 Aug. 1943	27 Nov. 1943
Koiner	5 Sep. 1943	27 Dec. 1943	Tomich	28 Dec. 1942	26 July 1943
Kretchmer	31 Aug. 1943	13 Dec. 1943	Vance	16 July 1943	1 Nov. 1943
Lancing	3 Aug. 1943	10 Nov. 1943	Willis	14 Sep. 1943	10 Dec. 1943
Lowe	28 July 1943	22 Nov. 1943			



PETERSEN. 1954, Skyfotos.,



CHAMBERS (as WDE). 1953, U.S.C.C., Official.



POOLE. Added 1950, U.S. Navy, Official.  
GT The planned construction and conversion programme for the Fiscal Year 1955 (1st July 1954 to 30th June 1955), subject to appropriations to be approved by Congress, provides for replacing the diesel engines in the escort vessel Mills (DE 383) with two British RM 60 gas turbines. Expected to reduce plant weight by approximately 15 per cent. while delivering 67 per cent. more power.

U.S.A.—Patrol Vessels

Rated as **Escort Vessels, Radar Picket (DER).**

2 Converted “John C. Butler” New Construction..

DER  
540 VANDIVIER

DER  
539 WAGNER

Displacement : 1,350 tons standard (2,100 tons full load)  
Dimensions : 306 (o.a.) × 36 × 11 (max.) feet  
Machinery : Geared turbines. 2 shafts. S.H.P. : 12,000 = 24 kts.

Notes.—The completion of these two destroyer escorts (DEs) launched in 1943, was suspended in August 1946. Under the 1954 fiscal year new construction and modernisation programme they are to be completed and converted to Radar Picket Escort Vessels (DERs) at Boston Naval Shipyard.

Name	Builders	Launched	Completed
Vandivier	Boston Naval Shipyard	27 Dec. 1943	1955
Wagner	Boston Naval Shipyard	10 Jan. 1943	1955

7 Converted “Buckley” Class.



WILLIAM T. POWELL.

1952, Ted Stone.

DER  
77 ALEXANDER J. LUKE  
51 BUCKLEY  
57 FOGG

DER  
153 REUBEN JAMES  
578 ROBERT I. PAYNE

DER  
223 SPANGENBURG  
213 WILLIAM T. POWELL

Displacement : 1,400 tons standard (2,170 tons full load)  
Dimensions : 306 (o.a.) × 36½ × 14 (max.) feet  
Guns : 2—5 inch, 38 cal. d.p., 8—40 mm. AA., and D.C.T.  
Machinery : Turbo-electric drive. 2 shafts. S.H.P. : 12,000 = 24 kts.  
Oil fuel : 340 tons  
Complement : 220

Notes.—Built as Destroyer Escorts (DE) with 3—3 inch guns. Subsequently known as Escort Vessels. Now grouped under generic heading of Patrol Vessels with the sub-classification : “Escort Vessels, Radar Picket” (DER). The conversion of six more DEs to DERs was requested in the 1955 fiscal appropriations.

Name	Builders	Launched	Completed
Alexander J. Luke	Bethlehem-Hingham	28 Dec. 1943	19 Feb. 1944
Buckley	Bethlehem-Hingham	9 Jan. 1943	30 Apr. 1944
Fogg	Bethlehem-Hingham	20 Mar. 1943	7 July 1943
Reuben James	Norfolk Naval Shipyard	6 Feb. 1943	1 Apr. 1943
Robert I. Payne	Bethlehem-Hingham	30 Dec. 1943	28 Feb. 1944
Spangenburg	Philadelphia Naval Shipyard	3 July 1943	15 Apr. 1944
William T. Powell	Charleston Naval Shipyard	27 Nov. 1943	28 Mar. 1944

Rated as **Escort Vessels, Radar Picket (DER).**

10 Converted “Edsall” Class.



JOYCE.

1952, Ted Stone.



SAVAGE (being converted to DER).

1950, U.S. Navy, Official.

DER  
142 FESSENDEN  
316 HARVESON  
393 HAVERFIELD

DER  
317 JOYCE  
318 KIRKPATRICK  
544 OTTERSTETTER

DER  
133 PILLSBURY  
386 SAVAGE  
333 STRICKLAND  
397 WILHOITE

Displacement : 1,200 tons (1,850 tons full load)  
Dimensions : 306 (o.a.) × 36½ × 11 (max.) feet  
Guns : 2—3 inch, 50 cal., 6—20 mm. AA.  
Machinery : Diesels. 2 shafts. B.H.P. : 6,000 = 21 kts.  
Complement : 220

Notes.—Originally rated as Destroyer Escorts (DE) but now grouped under the generic heading of Patrol Vessels with the specific designation of Radar Picket Escort Vessels. Six converted to DER 1951, Haverfield, Pillsbury, Savage and Wilhoite in 1954-55.

Name	Builders	Launched	Completed
Fessenden	Consolidated Steel Corporation	9 Mar. 1943	25 Aug. 1943
Harveson	Consolidated Steel Corporation	22 May 1943	12 Oct. 1943
Haverfield	Brown Shipbuilding Co., Houston	30 Aug. 1943	29 Nov. 1943
Joyce	Consolidated Steel Corporation	26 May 1943	30 Sep. 1943
Kirkpatrick	Consolidated Steel Corporation	5 June 1943	23 Oct. 1943
Pillsbury	Consolidated Steel Corporation	10 Jan. 1943	7 June 1943
Ottersetter	Brown Shipbuilding Co., Houston	19 Jan. 1943	6 Aug. 1943
Savage	Brown Shipbuilding Co., Houston	15 July 1943	29 Oct. 1943
Strickland	Consolidated Steel Corporation	2 Nov. 1943	10 Jan. 1944
Wilhoite	Brown Shipbuilding Co., Houston	5 Oct. 1943	16 Dec. 1943

Rated as **Escort Vessels (DE)**.

27 "Bostwick" Class.



EARL K. OLSEN.

1953, U.S. Navy, Official.

5 Tampa S.B. Co.

8 Western Pipe & Steel Co.

14 Federal S.B. & D.D. Co., Port Newark

DE

DE

DE

DE

765 EARL K. OLSEN  
770 MUIR  
769 NEAL A. SCOTT  
767 OSWALD  
771 SUTTON

746 HEMMINGER  
742 HILBERT  
743 LAMONS  
744 KYNE  
750 MCCLELLAND  
749 ROBERTS  
745 SNYDER  
748 TILLS

167 ACREE  
168 AMICK  
169 ATHERTON  
170 BOOTH  
171 CARROLL  
191 COFFMAN  
172 COONER

162 LEVY  
163 McCONNELL  
176 MICKA  
164 OSTERHAUS  
165 PARKS  
181 STRAUB  
180 TRUMPETER

Displacement : 1,240 tons (1,900 tons full load)  
Dimensions : 306 (o.a.) × 36½ × 10½ (mean) 12 (max). feet  
Guns : 3—3 inch, 50 cal., d.p., 2—40 mm. AA., 4—20 mm. AA. and D.C.T.  
Tubes : 3—21 inch, in triple mount (some have had torpedo tubes removed)  
Machinery : Diesel-electric, 2 shafts. B.H.P. : 6,000 = 20 kts. sea speed  
Complement : 220

**General Notes.**—The following vessels (DE) were formerly on the list of ships to be disposed of. They were removed from that list in 1952 and put back in the reserve fleet : Acree (167), Amick (168), Atherton (169), Booth (170), Carroll (171), Coffman (191), Cooner (172), Hilbert (742), Lamons (743), Levy (162), McConnell (163), Micka (176), Neal A. Scott (769), Osterhaus (164), Oswald (767), Parks (165), Straub (181), and Trumpeter (180).

**Class Notes.**—Eight ships of this class, originally rated as Destroyer Escorts (DE), were transferred to Brazilian Navy, four to Chinese Navy, and 14 to French Navy. Ebert (768), Eldridge (173), Garfield Thomas (193), and Slater (766) transferred to Greece 1951. Gandy (764), Thornhill (145) and Wesson (184) transferred to Italy 1951. Bangust (739), Waterman (740), and Weaver (741) transferred to Peru in 1952, and Baron (166) and Bronstein (189) transferred to Uruguay 1951.

Name	Launched	Completed	Name	Launched	Completed
Acree	9 May 1943	19 July 1943	McConnell	23 Mar. 1943	28 May 1943
Amick	26 May 1943	26 July 1943	Micka	22 Aug. 1943	23 Sep. 1943
Atherton	26 May 1943	29 Aug. 1943	Muir	4 June 1944	30 Aug. 1944
Booth	21 June 1943	19 Sep. 1943	Neal A. Scott	4 June 1944	31 July 1944
Carroll	21 June 1943	24 Oct. 1943	Osterhaus	18 Apr. 1943	12 June 1943
Coffman	28 Nov. 1943	27 Dec. 1943	Oswald	25 Apr. 1944	12 June 1944
Cooner	25 July 1943	21 Aug. 1944	Parks	18 Apr. 1943	22 June 1943
Earl K. Olsen	13 Feb. 1944	10 Apr. 1944	Roberts	14 Nov. 1943	2 Sep. 1944
Hemminger	12 Sep. 1943	30 May 1944	Snyder	29 Aug. 1943	5 May 1944
Hilbert	18 July 1943	4 Feb. 1944	Straub	18 Sep. 1943	25 Oct. 1943
Kyne	15 Aug. 1943	4 Apr. 1944	Sutton	6 Aug. 1944	22 Dec. 1944
Lamons	1 Aug. 1943	29 Feb. 1944	Tills	3 Oct. 1943	8 Aug. 1944
Levy	28 Mar. 1943	13 May, 1943	Trumpeter	18 Sep. 1943	25 Oct. 1943
MCClelland	28 Nov. 1944	19 Sep. 1944			

Radar Picket and Ordnance Testing Experimental Ship (AG ex-DD).



WINSLOW.

Added 1954, U.S. Navy, Official.

AG

127 WINSLOW (ex-DD 359)

Builders : New York Shipbuilding Corporation  
Laid down : 18 Dec. 1933  
Launched : 21 Sep. 1936  
Completed : 19 Oct. 1937

Displacement : 1,805 tons (2,130 tons full load)  
Dimensions : 381 (o.a.) × 37 × 17 (max.) feet  
Guns : 4—5 inch, 38 cal., 4—40 mm. Bofors  
Machinery : Geared turbines, 2 shafts. S.H.P. : 50,000 = 35 kts.  
Boilers : 4 Babcock & Wilcox high pressure  
Oil fuel : 600 tons  
Complement : 230

**Notes.**—Formerly DD 359, this original unit of the "Selfridge" class destroyers was modified for radar picket duty and an experimental ordnance testing ship. Torpedo tubes removed. Tripod lattice radar mast between funnels. Carries out training and trials duties from Norfolk with the Operational Development Force. Is rated operationally as EAG.

U.S.A.—Submarines

Submarines (New Construction).  
4 Atomic (Nuclear) Powered Type.

3 Electric Boat Co., Groton, Conn. 1 Portsmouth Naval Shipyard

SSN	SSN	SSN	SSN
571 NAUTILUS	575 SEA WOLF		
	Displacement :	3,180 tons standard (surface)	
	Dimensions :	320 (o.a.) × 30 feet	
	Tubes :	6—21 inch (Nautilus)	
	Machinery :	Nautilus engine : Thermal reactor and water coolant. S.H.P. : 1,500	
	Speed :	Sea Wolf engine : Intermediate reactor with a liquid metal coolant	
	Cost :	Over 20 kts. submerged (30 kts. submerged expected)	
	Complement :	\$40,000,000 (Nautilus) \$32,700,000 (Sea Wolf)	
		91	

Notes.—Nautilus engine by Westinghouse. Laid down 14 June 1952, launched 21 Jan. 1954. Her engine alone has cost about \$25,000,000. Reported to be designed to travel faster under water than on the surface. Her prow therefore is bulbous to obtain better under-water performance as compared with conventional submarines designed for top speed on surface and which have knife blade prows. Sea Wolf, another unit of this type ordered 19 July 1952, with engine of different type to be manufactured by General Electric Company to cost \$32,700,000 without engine. Diving depth 700 feet. Sea Wolf laid down 15 Sep. 1953. Nautilus has three deck levels, propulsion by either atomic power, diesel, or electric motors. Two more atomic powered submarines were requested in 1955 fiscal appropriations.

2 Portsmouth Navy Shipyard

SSR	SSR
572 SAILFISH	573 SALMON
	Displacement :
	Dimensions :
	Machinery :
	Speed :

Notes.—Ordered 27 Feb. 1952 for completion in 1954. To be fitted with an air control centre. Sailfish laid down 8 Dec. 1953, Salmon 10 Mar. 1954. Carry two torpedos.

1 Portsmouth Naval Shipyard

AGSS	
569 ALBACORE	
	Laid down :
	Launched :
	Completed :
	Displacement :
	Machinery :
	Complement :

Notes.—High speed underwater target and experimental submarine. Cost \$10,000,000.

2 Small Experimental Coastal (Target and Training) Type.

1 Electric Boat Co., Groton, Conn. 1 Portsmouth Naval Shipyard

SST	SST
S 1	S 2
	Displacement :
	Dimensions :
	Torpedo tubes :
	Machinery :
	Speed :
	Cost :
	Complement :

Notes.—T1 ordered 17 Mar. 1951, laid down 1 April 1952, and launched 17 July 1953. Smallest submarine built for 47 years. Stated to be useful in landing raiding parties. Same general appearance as other "Guppy" type submarines. T2 ordered 5 Jan. 1952 and laid down 12 May 1952, launched 14 Oct. 1953, completed 28 Nov. 1953. Classification SST and name T1 now supersedes AGSS 570 the classification and number previously assigned. For training surface and air anti-submarine forces.

Midget (Experimental) Type (Submersible Craft).

1 Fairchild Corpn.

XI	
	Displacement :
	Dimensions :
	Speed :
	Range :
	Complement :

Notes.—Prototype now laid down Jan. 1954 at the Fairchild Engine and Airplane Corporation, New York. "Secret" fuel.

High Speed Attack Submarines (SS).  
2 Improved "Tang" Class (New Construction).

1 Mare Island Naval Shipyard

SS	
573 GRAYBACK	
	Dimensions :
	Machinery :

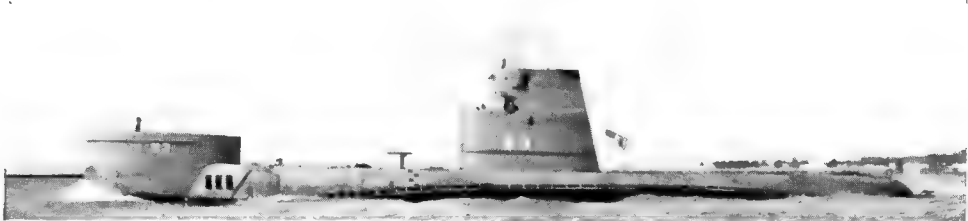
1 Electric Boat Div. Gen. Dyn. Corpn.

SS	
576	
	Length :
	Diesel :

Notes.—New design attack submarine with streamlined Guppy snorkel equipment and a conventional engine of improved design. Ordered 19 June 1952, laid down summer 1954. SS 576 to be built by the Electric Boat Division of the General Dynamics Corpn Groton, Conn. under the 1954 fiscal year new construction programme is reported to be designed for significantly higher under-water speed than SSNs. Two SS with conventional diesel propulsion are requested in the 1955 fiscal appropriations.

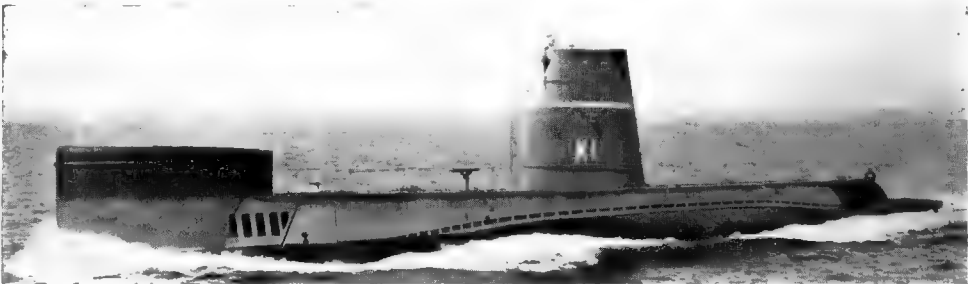
Submarine Hunter Killers (SSK).

3 "K" Class.



K 3.

1954, U.S. Navy, Official.



K 1.

1952, U.S. Navy, Official.

SSK	SSK	SSK
K 1	K 2	K
	Displacement :	765 tons standard
	Dimensions :	196 (o.a.) × 25 × 16 feet
	Machinery :	3 General Motors diesel electric. 2 shafts. S.H.P. : 1,050 = 13 kts.
	Complement :	49

Notes.—Medium size, "extremely quiet," and very handy design specifically built for A S operations. Have letters and numbers instead of names. Have ungainly prow full of listening gear, newest electronic and sonar detection equipment, short hull, which makes them highly manoeuvrable and suitable for ambushing other submarines. Carry "target seeking" torpedoes.

Name	Builders	Laid down	Launched	Completed
K 1	Electric Boat Co.	1 July 1949	2 Mar. 1951	10 Nov. 1951
K 2	Mare Island Naval Shipyard	23 Feb. 1950	2 May 1951	11 Jan. 1952
K 3	Mare Island Naval Shipyard	17 Mar. 1950	21 June 1951	11 Feb. 1952

General Note.—The former Electric Boat Co., Groton, Conn. mentioned throughout the submarine pages is now known as the Electric Boat Division of the General Dynamics Corpn., Groton, Conn.



## High-Speed Attack Submarines (SS).

## 6 "Tang" Class.



TANG.

1952, U.S. Navy, Official.



TRIGGER.

1952, U.S. Navy, Official.

3 Portsmouth Naval Shipyard

3 Electric Boat Company, Groton

## SS

## SS

563 TANG  
565 WAHOO  
567 GUDGEON

564 TRIGGER  
566 TROUT  
568 HARDER

Displacement : 1,615 tons standard, 1,800 tons surface  
Dimensions : 269 (o.a.) × 27 × 17 feet  
Tubes : 6—21 inch  
Machinery : Diesel-electric designed for 15 to 20 kts. (surface), over 17 kts. (submerged)  
Complement : 78 (Tang, Wahoo 82, Trigger 83)

**General Notes.**—Embodiment various improvements based on war experience to give higher submerged speed, with a development of the Schnorkel breathing tubes. They are streamlined deep-diving vessels but have comparatively short hulls. *Trigger* was the first submarine of the post-war programme to be laid down. *Tang* was the first of the new class to be completed (first large submarines to be constructed by the U.S. Navy since the Second World War). Reported to be most advanced in the world. Faster, more manoeuvrable and capable of more diversified employment than their predecessors of the wartime fleet type and the more recent guppy-schnorkel conversions.

**Engineering Notes.**—Powered by a compact radial type engine produced after five years of development work, comprising a 16-cylinder 2 cycle plant, mounted vertically with four rows of cylinders, radially arranged. These new engines are only half the weight and approximately two-thirds the size of the engines previously available for use in submarines. *Gudgeon* and *Harder* have 3 Fairbanks-Morse high speed light weight engines mounted horizontally. The hull is shorter than current fleet types, and this reduction in length is said to contribute to the underwater speed.

Name	Laid down	Launched	Completed	Name	Laid down	Launched	Completed
Gudgeon	20 May 1950	11 June 1952	21 Nov. 1952	Trigger	24 Feb. 1949	14 June 1951	31 Mar. 1952
Harder	30 June 1950	3 Dec. 1951	19 Aug. 1952	Trout	1 Dec. 1949	21 Aug. 1951	27 June 1952
Tang	18 April 1949	19 June 1951	25 Oct. 1951	Wahoo	24 Oct. 1949	16 Oct. 1951	30 May 1952

## Submarines (SS).

## 28 + 2 "Tench" Class.



ARGONAUT.

1954, A. &amp; J. Pavia.



TUSK.

1953, A. &amp; J. Pavia.

4 Boston Naval Shipyard

21 Portsmouth Naval Shipyard

## SS

SS  
G 522 AMBERJACK (Dec. 15, 1944)  
G 523 GRAMPUS (Dec. 15, 1944)  
G 525 GRENADIER (Dec. 15, 1944)  
G 524 PICKEREL (Dec. 15, 1944)

475 ARGONAUT (Oct. 1, 1944)  
477 CONGER (17 Oct 1944)  
478 CUTLASS (Nov. 5, 1944)  
479 DIABLO (Nov. 30, 1944)  
482 IREX (Jan. 26, 1945)  
480 MEDREGAL (Dec. 15, 1944)  
G 484 ODAX (April 10, 1945)  
G 486 POMODON (Dec. 6, 1945)  
G 424 QUILLBACK (ex-Trembler, Oct. 1, 1944)  
G 487 REMORA (Dec. 7, 1945)

SS  
476 RUNNER (Oct. 17, 1944)  
488 SARDA (Aug. 24, 1945)  
G 483 SEA LEOPARD (March 2, 1945)  
G 485 SIRAGO (May 11, 1945)  
G 418 TENCH (July 7, 1944)  
G 418 THORNBARK (July 7, 1944)  
G 420 TIRANTE (Aug. 9, 1944)  
422 TORO (Aug. 19, 1944)  
423 TORSK (Sept. 6, 1944)  
G 421 TRUTTA (Aug. 18, 1944)  
G 490 VOLADOR (Jan. 17, 1946)

2 Cramp S.B. Co.  
G 425 TRUMPETFISH (Feb. 19, 1944)  
G 426 TUSK (July 8, 1945)

3 Electric Boat Co.  
435 CORSAIR (April 19, 1946)  
\*436 UNICORN (Aug. 1, 1946)  
\*437 WALRUS (Sept. 20, 1946)

Displacement : 1,570 tons (2,500 tons submerged)  
Dimensions : 311½ (o.a.), Guppies 306 (length varies) × 27½ × 17 (surface) feet  
Guns : 1—5 inch, 25 cal., 2—40 mm. AA. (Guppies, none)  
Tubes : 10—21 inch  
Machinery : B.H.P.: 6,500=20 kts. (surface), H.P.: 2,750=10 kts. (submerged), Guppies 15 kts.  
Complement : 85

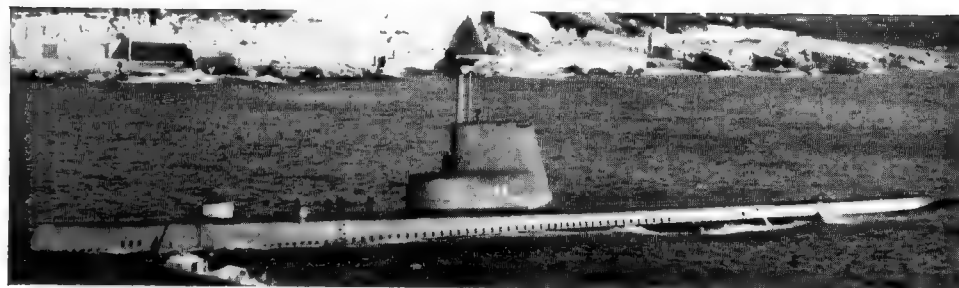
**General Notes.**—Enlarged and improved version of *Baloo* design, able to dive to 100 fathoms. Nearly all fitted with a development of the German Schnorkel breathing apparatus. *Pickrell*, commissioned April 4, 1949, made a 5,200 miles run from Hong Kong to Pearl Harbour in 21 days without surfacing in 1950. In 1952, she surfaced in tests at a 48 degree angle from a depth of 150 feet, one of the steepest ever attempted. Both tests made to evaluate the capabilities and design characteristics of guppy type submarines. *Requin*, *Spinax* and *Tigrone* converted to Radar Picket Submarines (see later page). *Grenadier* commissioned 10 Feb. 1951.

**Experimental Notes.**—Partly completed *Turbot* (SS 427) is being used for sound, vibration and internal combustion tests, by Navy Engineering Experimental Station, Annapolis; and partly constructed *Ulus* (SS 428) is being used for tests in connection with the new atomic powered submarines.

G 18 units marked G are of the new "Guppy" (Greater Underwater Propulsive Power) design equipped with the latest devices.  
• Construction of *Unicorn* and *Walrus* still suspended. 93 more of this class were cancelled during 1944-45, including *Chicolar*, *Comber*, *Dorado*, *Grayling*, *Needlefish* (493), *Pompano*, *Sculpin*, *Tiburón*, *Wahoo* (516).

## U.S.A.—Submarines

### Submarines (SS). 89 + 1 "Balao" Class.



CHOPPER.

10 Cramp S.B. Co.

#### SS

292 DEVILFISH (May 30, 1943)  
293 DRAGONET (April 18, 1943)  
295 HACKLEBACK (May 30, 1943)  
\*296 LANCETFISH (Aug. 18, 1943)  
297 LING (Aug. 18, 1943)  
298 LIONFISH (Nov. 7, 1943)  
300 MORAY (May 14, 1944)  
301 RONCADOR (May 14, 1944)  
302 SABALO (June 4, 1944)  
303 SABLEFISH (June 4, 1944)

28 Electric Boat Co.

311 ARCHERFISH (May 29, 1943)  
309 ASPRO (ex-Acedia, April 7, 1943)  
310 BATFISH (ex-Acoupa, May 3 1943)  
G 319 BECUNA (Jan. 30, 1944)  
G 320 BERGALL (Feb. 16, 1944)  
G 321 BESUGO (Feb. 27, 1944)  
G 322 BLACKFIN (March 12, 1944)  
G 324 BLENNY (April 9, 1944)  
331 BUGARA (July 2, 1944)  
334 CABEZON (Aug. 27, 1944)  
G 323 CAIMAN (ex-Blanquillo, March 30, 1944)  
336 CAPITAIN (Oct. 1, 1944)  
338 CARP (Nov. 12, 1944)  
G 339 CATFISH (Nov. 19, 1944)  
328 CHARR (ex-Bocaccio, May 28, 1944)  
G 341 CHIVO (Jan. 14, 1945)  
G 342 CHOPPER (Feb. 14, 1945)  
G 343 CLAMAGORE (Feb. 23, 1945)  
G 344 COBBLER (April 1, 1945)

#### SS

G 346 CORPORAL (June 10, 1945)  
G 347 CUBERA (June 17, 1945)  
348 CUSK (28 July 1945)  
T 335 DENTUDA (Sept. 10, 1944)  
G 349 DIODON (Sept. 10, 1945)  
G 350 DOGFISH (Oct. 27, 1945)  
G 340 ENTEMEDOR (ex-Chiswick, Dec. 17, 1944)  
G 351 GREENFISH (ex-Doncella, Dec. 21, 1945)  
□ 352 HALBEAK (ex-Dory, Feb. 19, 1946)

10 Manitowoc S.B. Co.

G 365 HARDHEAD (Dec. 12, 1943)  
368 JALLAO (March 12, 1944)  
370 KRAKEN (April 30, 1944)  
372 LAMPREY (June 18, 1944)  
373 LIZARDFISH (July 16, 1944)  
374 LOGGERHEAD (Aug. 13, 1944)  
375 MACABI (Sept. 19, 1944)  
376 MAPIRO (Nov. 9, 1944)  
G 377 MENHADEN (Dec. 20, 1944)  
378 MERO (Jan. 17, 1945)

8 Mare Island Navy Yard

304 SEAHORSE (Jan. 9, 1943)  
411 SPADEFISH (Jan. 8, 1943)  
413 SPOT (May 20, 1944)  
414 SPRINGER (Aug. 3, 1944)  
G 415 STICKLEBACK (Jan. 1, 1944)  
G 307 TILEFISH (Oct. 25, 1944)  
G 416 TIREFISH (Sept. 16, 1947)  
412 TREPANG (March 23, 1944)

Displacement : 1,526 tons (2,425 tons submerged)  
Dimensions : 311½ × 27 × 17 feet (Guppy conversions 309 (o.a.) feet, but length varies)  
Guns : Mostly 1 or 2—5 inch, 25 cal., 2—40 mm. AA., Armament varies (Guppies, no guns)  
Tubes : 10—21 inch (6 bow, 4 stern), 24 torpedoes  
Machinery : G.M. or Fairbanks-Morse 2-stroke Diesels. B.H.P. : 6,500 = 20 kts. (surface), H.P. : 2,750 = 10 kts. (submerged). Dogfish, submerged speed, 17.25 kts.  
Complement : 85

Notes.—In order to facilitate rapid building, all were of the same general type as Gato class, and of all-welded construction. Average time of construction during war was reduced to about nine months. High standard of accommodation, including separate messing and sleeping compartments. War losses : Barbel, Bullhead, Capelin, Cisco, Escalar, Golet, Kete, Lagarto, Shark, Tang, 16 cancelled : Dugong, Eel, Espada, Garloppa, Gauppa, Goldring, Jawfish, Needlefish (379), Nerka, Ono, Turbot, Ulua, Vandace (431), Whitefish, Whiting, Wolffish. In addition Apogan, Pilotfish and Skate were scrapped after being employed as atom bomb targets at Bikini 1946. Dentuda and Parche of this class are non-operational submarines assigned to Naval Reserve Training duties. Cusk armed with guided missiles ; Barbero equipped to carry cargo ; Sealion and Perch fitted to carry troops ; and Burrfish modified for radar picket duties with reduced armament ; Guavina converted to oiler. Tiru altered during construction for higher submerged speed. Boya equipped for electronic experiments (see later pages). Cochino sank off the northern coast of Norway, Aug. 26, 1949. Blower (325), Blueback (326), Boarfish (327), Chub (239), Brill (330), Bumper (333), transferred to Turkish Navy, Hawkbill and Icefish (guppies) transferred to Royal Netherlands Navy in 1953 (on loan for five years). Spikefish has made 6,000 dives (1954). Lancefish suspended. G 31 units converted into "Guppies" SS 392, 403 and 407 did not convert. T 2 training units. M Conversion of Picuda into a submarine minelayer cancelled. Cusk, former SSG now reclassified as SS (see photo, page 426).

1952, A. & J. Pavia.  
34 Portsmouth Navy Yard

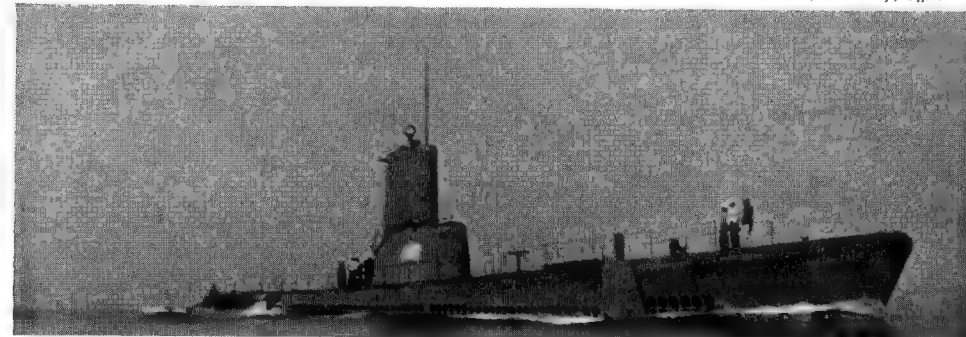
#### SS

403 ATULE (March 6, 1944)  
285 BALAO (Nov., 1942)  
385 BANG (Aug. 30, 1943)  
286 BILLFISH (Nov. 13, 1942)  
287 BOWFIN (Dec. 7, 1943)  
288 CABRILLA (Dec. 24, 1942)  
291 CREVALLE (Feb. 22, 1943)  
383 PAMPANITO (July 12, 1943)  
T 384 PARCHE (July 24, 1943)  
M 382 PICUDA (ex-Obisto, July 12, 1943)  
387 PINTADO (Sept. 15, 1943)  
388 PIPEFISH (Oct. 12, 1943)  
409 PIPER (ex-Awa, June 26, 1944)  
389 PIRANHA (Oct. 27, 1943)  
390 PLAICE (Nov. 15, 1943)  
G 391 POMFRET (Oct. 27, 1943)  
393 QUEENFISH (Nov. 30, 1943)  
G 394 RAZORBACK (Jan. 27, 1944)  
395 REDFISH (Jan. 27, 1944)  
G 396 RONQUIL (Jan. 27, 1944)  
381 SAND LANCE (ex-Orca, ex-Orjanco June 25, 1943)  
397 SCABBARDFISH (Jan. 27, 1944)  
399 SEA CAT (Feb. 21, 1944)  
400 SEA DEVIL (Feb. 28, 1944)  
401 SEA DOG (March 28, 1944)  
G 402 SEA FOX (March 28, 1944)  
405 SEA OWL (May 7, 1944)  
G 406 SEA POACHER (May 20, 1944)  
407 SEA ROBIN (May 25, 1944)  
398 SEGUNDO (Feb. 5, 1944)  
408 SENNET (June 6, 1944)  
404 SPIKEFISH (ex-Shiner, Apr. 26, 1944)  
392 STERLET (Oct. 27, 1943)  
G 410 THREADFIN (ex-Sole, June 26, 1944)



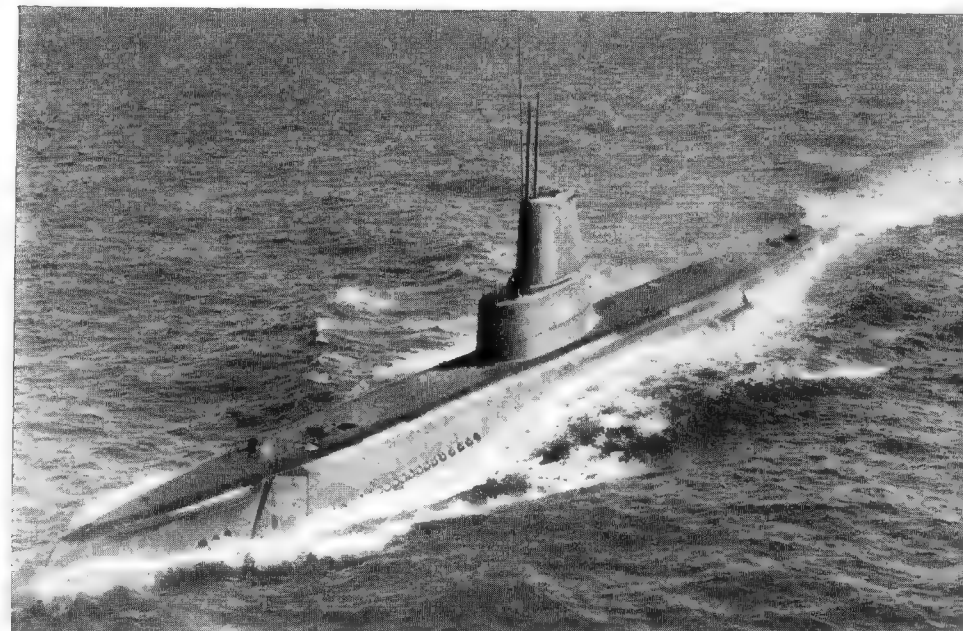
REDFISH.

1953, U.S. Navy, Official



PIPER.

1952, Charles C. Rumsegh.

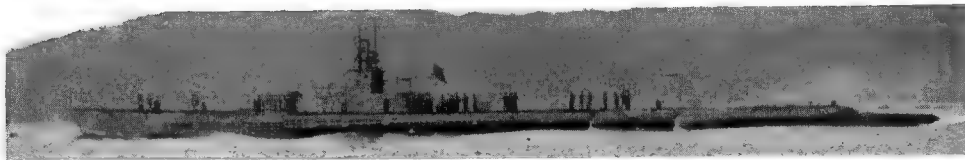


CORPORAL.

Added 1950, U.S. Navy, Official.

Submarines (SS).

36 "Gato" Class.



GATO.

Added 1954, U.S. Navy, Official.

22 Electric Boat Co.

BLACKFISH  
BLUEFISH  
CERO  
COBIA  
COD  
FLASHER  
FLOUNDER  
GABILAN  
GATO  
GREENLING  
GUARDFISH  
GUNNEL  
GURNARD  
HADDO

HAKE  
HOE  
JACK  
LAPON  
MINGO  
MUSKALLUNGE  
PADDLE  
T PARGO

3 Manitowoc S.B. Co.

PETO  
POGY  
T PUFFER

4 Mare Island Navy Yard

T SILVERSIDES  
T SUNFISH  
TINOSA  
WHALE

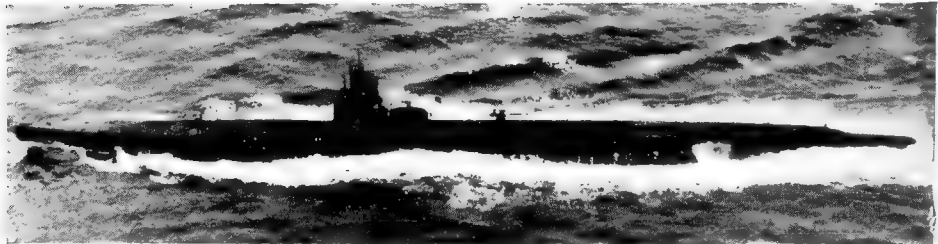
7 Portsmouth Navy Yard

T DRUM  
FINBACK  
T HADDOCK  
T KINGFISH  
T SAWFISH  
T SHAD  
T STEELHEAD

Displacement : 1,525 tons (2,425 tons submerged)  
Dimensions : 311½ x 27 x 17 feet  
Guns : Vary 1—3 or 5 inch, 50—25 cal., d.p., 2—20 mm. AA. ; but some, including *Finback*, had 2—5 inch, 25 cal., 2—40 mm. AA.  
Tubes : 10—21 inch (6 bow, 4 stern)  
Machinery : G.M. 2-stroke Diesels and electric motors. Have 2 engine-rooms instead of 1 as in "Tambor" class, to reduce size of compartments. B.H.P. : 6,500 = 21 kts. (surface). H.P. : 2,750 = 10 kts. (submerged)  
Complement : 85

**General Notes.**—Ordered under the 1939-1941 Programmes. Are improved editions of "Tambor" class. Inclusive cost per ship officially estimated at \$6,288,200. War losses : *Albacore*, *Amberjack*, *Bonfish*, *Corvina*, *Darter*, *Dorado*, *Flier*, *Growler*, *Grunion*, *Harder*, *Herring*, *Robalo*, *Runner*, *Scamp*, *Scorpion*, *Snook*, *Trigger*, *Tullibee*, *Wahoo*. Following units of this class have been assigned to training duties with Naval Reserve units : *Drum*, *Greenling*, *Guardfish*, *Gurnard*, *Haddock*, *Kingfish*, *Pargo*, *Puffer*, *Sawfish*, *Shad*, *Silverfish*, *Steelhead*, *Sunfish*.  
In 1954 *Barb* SS 220, and *Dace* SS 247, were transferred to Italy, and *Guittaro* SS 363, and *Hammerhead* SS 364, to Turkey.

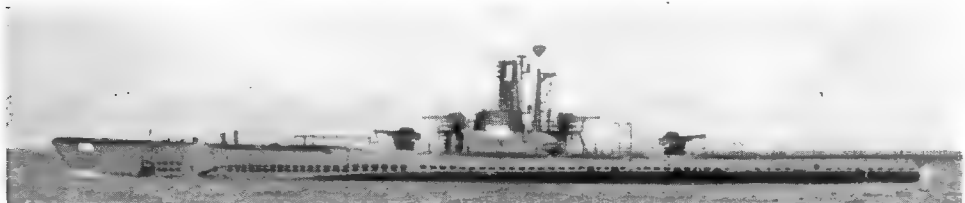
**Conversion Notes.**—*Grouper* was converted to a large submarine hunter-killer (SSK) in 1950 and *Angler*, *Bashaw*, *Bluegill*, *Bream*, *Cavalla*, and *Croaker* were similarly converted to anti-submarine submarines (SSK) in 1951-53. *Pompon*, *Rasher*, *Raton*, *Ray*, *Redfin* and *Rock* were converted to Radar Picket Submarines (SSR); and *Flying Fish* was converted to an experimental submarine (AGSS). *Tunny* was converted to a Guided Missile Submarine (SSG) in 1953.  
(13 units marked T are non-operational submarines assigned to naval reserve training). *Blackfish* and *Gato*, formerly for naval reserve training were laid up in reserve fleet 1954.



HAKE.

1944, U.S. Navy, Official.

No.	Name	Laid down	Launched	Completed
212	<i>Gato</i>	5 Oct. 1940	21 Aug. 1941	31 Dec. 1941
213	<i>Greenling</i>	12 Nov. 1940	20 Sep. 1941	21 Jan. 1942
217	<i>Guardfish</i>	1 Apr. 1941	20 Jan. 1942	8 May 1942
221	<i>Blackfish</i>	1 July 1941	18 Apr. 1942	22 July 1942
222	<i>Bluefish</i>	5 June 1942	21 Feb. 1943	23 May 1943
224	<i>Cod</i>	21 July 1942	21 Mar. 1943	21 June 1943
225	<i>Cero</i>	24 Aug. 1942	4 Apr. 1943	3 July 1943
228	<i>Drum</i>	11 Sep. 1943	12 May 1941	23 Dec. 1941
230	<i>Finback</i>	5 Feb. 1941	25 Aug. 1941	19 Mar. 1942
231	<i>Haddock</i>	31 Mar. 1941	20 Oct. 1941	14 Mar. 1942
234	<i>Kingfish</i>	29 Aug. 1941	2 Mar. 1942	16 June 1942
235	<i>Shad</i>	24 Oct. 1941	15 Apr. 1942	15 July 1942
236	<i>Silverfish</i>	4 Nov. 1940	26 Aug. 1941	15 Dec. 1942
239	<i>Whale</i>	28 June 1941	14 Mar. 1942	1 June 1942
245	<i>Cobia</i>	17 Mar. 1943	28 Nov. 1943	28 Mar. 1944
249	<i>Flasher</i>	30 Sep. 1942	20 June 1943	25 Sep. 1943
251	<i>Flounder</i>	5 Dec. 1942	22 Aug. 1943	29 Nov. 1943
252	<i>Nabilan</i>	5 Jan. 1943	19 Sep. 1943	28 Dec. 1943
253	<i>Gurnard</i>	21 July 1941	17 May 1942	20 Aug. 1942
254	<i>Gurnard</i>	2 Sep. 1941	1 June 1942	18 Sep. 1942
255	<i>Haddo</i>	1 Oct. 1941	21 June 1942	9 Oct. 1942
256	<i>Hake</i>	1 Nov. 1941	July 1942	30 Oct. 1942
258	<i>Hoe</i>	2 Jan. 1942	17 Sep. 1942	16 Dec. 1942
259	<i>Jack</i>	2 Feb. 1942	16 Oct. 1942	6 Jan. 1943
260	<i>Lapon</i>	21 Feb. 1942	27 Oct. 1942	23 Jan. 1943
261	<i>Mingo</i>	21 Mar. 1942	13 Dec. 1942	12 Feb. 1943
262	<i>Muskallunge</i>	7 Apr. 1942	30 Dec. 1942	15 Mar. 1943
263	<i>Paddle</i>	1 May 1942	30 Nov. 1942	29 Mar. 1943
264	<i>Pargo</i>	21 May 1942	24 Jan. 1943	26 Apr. 1943
265	<i>Peto</i>	18 June 1941	30 Mar. 1942	21 Nov. 1943
266	<i>Pogy</i>	15 Sep. 1941	22 June 1942	10 Jan. 1942
268	<i>Puffer</i>	16 Feb. 1942	22 Nov. 1942	22 Apr. 1943
276	<i>Sawfish</i>	20 Jan. 1942	23 June 1942	26 Aug. 1942
280	<i>Steelhead</i>	1 June 1942	11 Sep. 1942	7 Dec. 1943
281	<i>Sunfish</i>	25 Sep. 1941	2 May 1942	15 July 1942
283	<i>Tinosa</i>	21 Sep. 1942	8 Oct. 1942	1 Mar. 1943



SEACAT (see previous page).

1951, U.S. Navy, Official.



ROCK (see next page).

1944, U.S. Navy, Official.

U.S.A.—Submarines

Guided-missile Submarines (SSG).

Note.—The conversion of another submarine for the launching of guided missiles (SS to SSG) is planned under the 1955 construction and conversion programme.

I Converted “Balao” Class.



CUSK.  
SSG  
337 CARBONERO

1951, U.S. Navy, Official.

Displacement : 1,526 tons (2,425 tons submerged)  
Dimensions : 311½ × 27 × 17 feet  
Machinery : Diesels : B.H.P. : 6,500 = 20 kts. (surface), H.P. : 2,750 = 15 kts. (submerged)

Notes.—Before conversion were of “Balao” class, see earlier page. Carbonero launched a guided missile in 1949. Conversion of Cusk for guided missile operation was completed and test carried out in June 1948. “Loon” missile is contained in a watertight steel hangar and takes off from a ramp fixed to the submarine’s deck. Equipped with snorkel. Cusk was reclassified as SSG on conversion, but was reclassified as SS in 1954. See page 424.

Name	Builders	Launched	Completed
Carbonero	Electric Boat Co. Groton.	15 Oct. 1944	7 Feb. 1945

I Converted “Gato” Class.



TUNNY.  
SSG  
282 TUNNY

1953, U.S. Navy, Official.

Builders : Mare Island Naval Shipyard  
Laid down : 10 Nov. 1941  
Launched : 1 July 1942  
Completed : 1 Sep. 1942

Displacement : 1,525 tons (2,452 tons submerged)  
Dimensions : 311½ × 27 × 17 feet  
Machinery : Diesels B.H.P. : 6,500 = 21 kts. (surface), Electric motors, H.P. : 2,750 = 10 kts. (submerged)

Notes.—Before conversion was of “Gato” class, see preceding page. Converted by Mare Island Naval Shipyard, Vallejo, California. Equipped with “Regulus” guided missiles, 80 feet long.

Radar Picket Submarines (SSR).

6 Converted “Gato” Class.

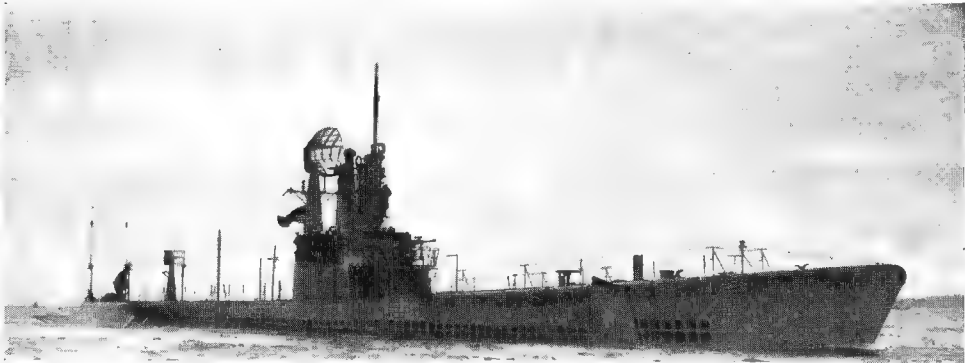
6 Manitowoc S.B. Co.

SSR	SSR	SSR
267 POMPON	270 RATON	272 REDFIN
269 RASHER	271 RAY	274 ROCK

Notes.—Before conversion were of “Gato” class, see preceding page, Pompon, Ray, Redfin and others were cut in two to permit the installation of new electronic equipment. Two new midsections lengthen them from 311 feet to 343 feet and increase their displacement to nearly 2,500 tons. Redfin re-commissioned 9 Jan. 1953. Rock re-commissioned 12 Oct. 1953.

Name	Laid down	Launched	Completed
Pompon	26 Nov. 1941	15 Aug. 1942	17 Mar. 1943
Rasher	4 May 1942	20 Dec. 1942	8 June 1943
Raton	29 May 1942	24 Jan. 1943	13 July 1943
Ray	20 July 1942	28 Feb. 1943	27 July 1943
Redfin	3 Sep. 1942	4 Apr. 1943	31 Aug. 1943
Rock	23 Dec. 1942	20 June 1943	26 Oct. 1943

3 Converted “Tench” Class.



REQUIN.

1953, Wright & Logan.



TIGRONE.

1952, A. & J. Pavia

3 Portsmouth Naval Shipyard

SSR	SSR	SSR
481 REQUIN (Jan. 1, 1945)	489 SPINAX (Nov. 20, 1945)	419 TIGRONE (July 20, 1944)

Notes.—Before conversion were of “Tench” class, see earlier page. Tigrone completed Feb. 21, 1949. All have reduced armament (1—40 mm.). Units vary in detail.

**Radar Picket Submarines (SSR) continued.**  
1 Converted "Balao" Class.

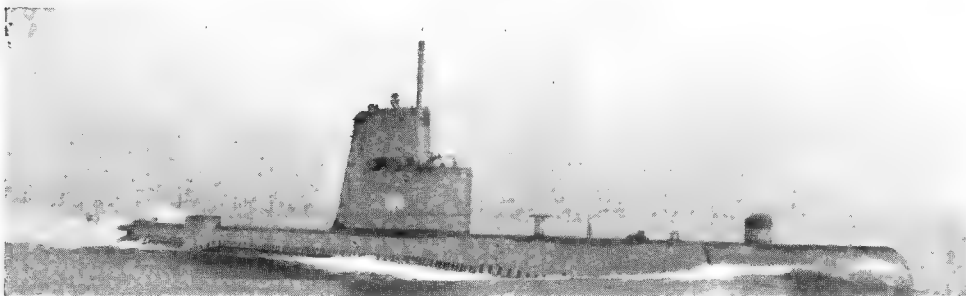


1953, U.S. Navy, Official.

**SSR**  
**312 BURRFISH** (ex-Amillo)  
Builders : Electric Boat Co., Groton  
Launched : June 18 1943

Note.—For main particulars, see "Balao" class on earlier page.

**Submarine Hunter Killers (Large Type). (SSK).**  
7 Converted "Gato" Class.



GROUPEE. 1953, U.S. Navy, Official.

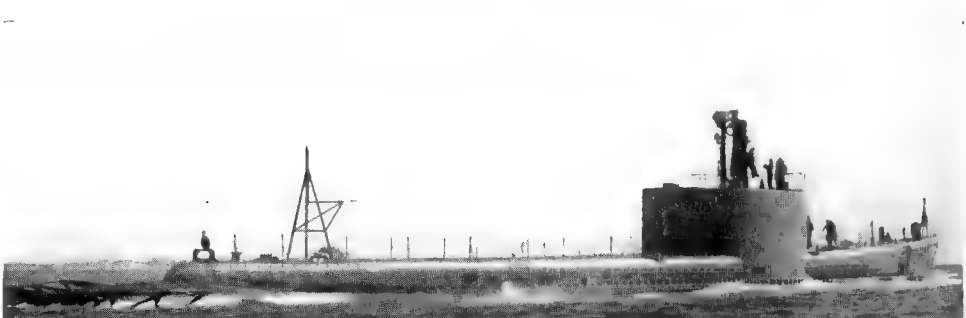
Electric Boat Co.	<b>SSK</b>	<b>SSK</b>
<b>SSK</b>	<b>241 BASHAW</b>	<b>243 BREEM</b>
<b>214 GROUPEE</b>	<b>242 BLUEGILL</b>	<b>244 CAVALLA</b>
<b>240 ANGLER</b>		<b>246 CROAKER</b>

Displacement : 1,525 tons (2,425 tons submerged)  
Dimensions : 311½ x 27 x 17 feet  
Machinery : Diesels, B.H.P. : 6,500 = 21 kts. (surface). Electric motors, H.P. : 2,750 = 15 kts. (submerged).

Notes.—Completed as units of the "Gato" class, see earlier page. Grouper redesignated SSK (Large) in 1950, remainder in 1951. Contract for conversion of Angler and Cavalla awarded to Electric Boat Co., Groton, Connecticut, March 1952. Bashaw com- missioned April 1953.

Name	Laid down	Launched	Completed	Name	Laid down	Launched	Completed
Angler	9 Nov. 1942	4 July 1943	1 Oct. 1943	Bream	5 Feb. 1943	17 Oct. 1943	24 Jan. 1944
Bashaw	4 Dec. 1942	25 July 1943	25 Oct. 1943	Cavalla	4 Mar. 1943	14 Nov. 1943	29 Feb. 1944
Bluegill	17 Dec. 1942	8 Aug. 1943	11 Nov. 1943	Croaker	1 Apr. 1943	19 Dec. 1943	21 Apr. 1944
				Grouper	28 Dec. 1940	27 Oct. 1941	12 Feb. 1942

**Experimental Submarines (AGSS), Miscellaneous.**  
1 Converted "Gato" Class.



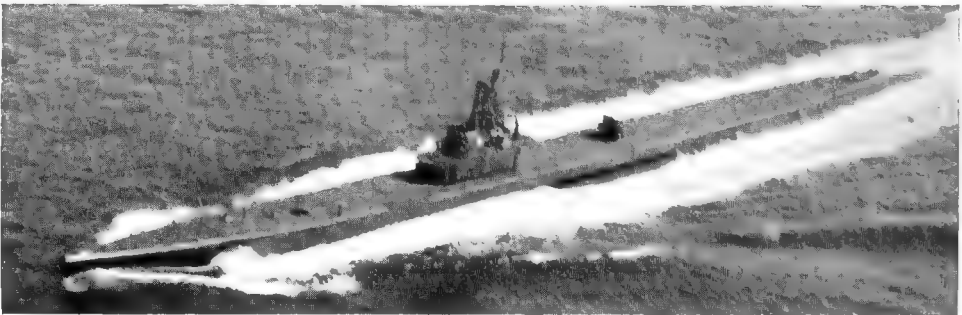
FLYING FISH.

1952, U.S. Navy, Official.

**AGSS**  
**229 FLYING FISH**  
Builders : Portsmouth Navy Yard  
Laid down : 6 Dec., 1940  
Launched : 9 July, 1941  
Completed : 10 Dec., 1941  
Displacement : 1,800 tons surface ; 2,400 tons submerged  
Dimensions : 311 x 27 x — feet  
Machinery : All original main machinery except batteries  
Complement : 80

Notes.—Completed as a unit of the "Gato" class, see earlier page. Flagship of Commander Submarines, Atlantic Fleet 1945-51. Classification changed due to installation of experimental sound equipment. During 1951-52 operated with the Underwater Sound Laboratory on various projects. Officially stated by Department of Defense to be the first submarine in history to make 5,000 dives (recorded in Long Island Sound, 29 Feb. 1952) and U.S. Navy's most durable submarine.

2 Converted "Balao" Class.



BAYA.

Added 1951, U.S. Navy, Official.

**AGSS**  
**318 BAYA**  
**AGSS**  
**299 MANTA**

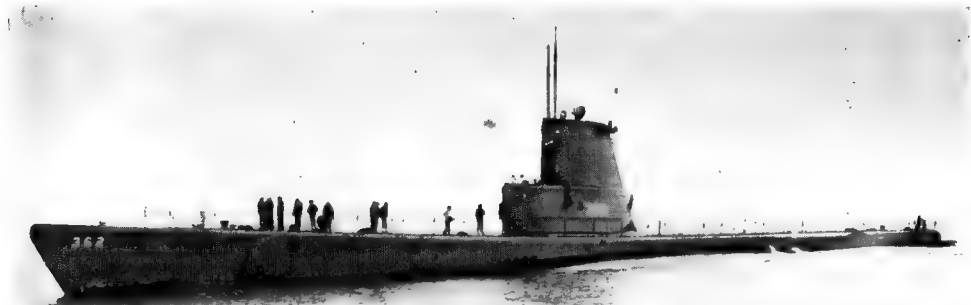
Notes.—Were of "Balao" class before conversion. Now employed experimentally and rated AGSS. Auxiliary, General, Submarine. Alterations made to these submarines are such that they are no longer combatant vessels. Baya has been converted to a laboratory submarine for electronic experiments and Manta to a target submarine. The torpedo tubes and appendages have been made inoperative.

Name	Builders	Laid down	Launched	Completed
Baya	Electric Boat Co., Groton	18 Apr. 1943	2 Jan. 1944	20 May 1944
Manta	Cramp Shipbuilding Co.	15 Nov. 1942	7 Nov. 1943	20 Jan. 1945



U.S.A.—Submarines

Submarine Oiler (AGSS, ex-SSO).  
1 Converted "Balao" Class.



GUAVINA. Added 1950, International News Photos.

**AGSS**  
**362 GUAVINA**

Builders :	Manitowoc Shipbuilding Co.
Launched :	29 Aug., 1943
Completed :	23 Dec., 1943
Displacement :	1,750 tons standard (2,730 tons full load)
Machinery :	4 General Motors diesels. S.H.P. : 4,160 = 16 kts.

Notes.—Before conversion was of "Balao" class, see earlier page. Fitted out at Mare Island Naval Shipyard at a cost of \$2,000,000, with exterior tanks for bulk liquids and special compartments which permit cargo in watertight cases to be discharged while the craft is submerged. Beam increased from 27 to 37 feet. Re-commissioned 1 Feb. 1950. Formerly classified as Submarine Oiler, SSO, but now re-classified as AGSS (Miscellaneous Submarine).

Cargo Submarine (ASSA).  
Amphibious Supply-carrying Type.  
1 Converted "Balao" Class.



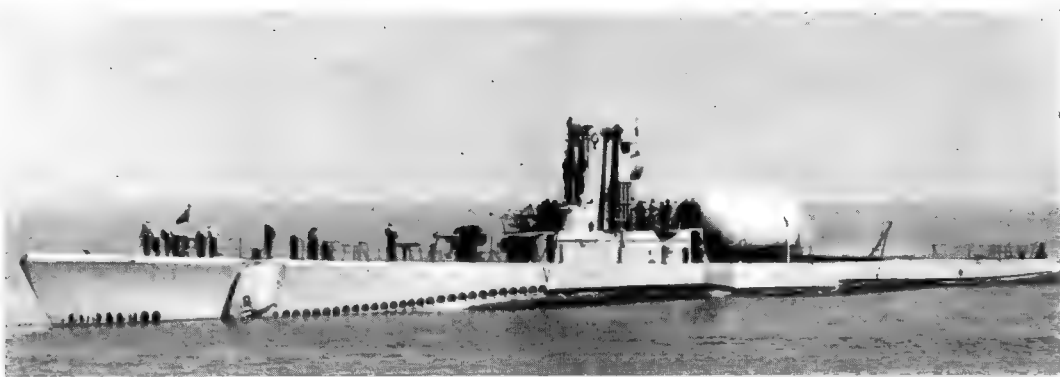
Added 1951, U.S. Navy, Official.

**ASSA**  
**317 BARBERO**

Builders	Electric Boat Co., Groton
Launched :	12 Dec., 1943
Completed :	29 Apr., 1944

Notes.—Was of "Balao" class before conversion, see earlier page. Now classified as "Amphibious Vessel, Submarine Cargo," ASSA.

Transport Submarines (ASSP).  
Amphibious Troop-carrying Type.  
2 Converted "Balao" Class.



PERCH. Added 1949, U.S. Navy, Official.

<b>ASSP</b> <b>313 PERCH</b>	<b>ASSP</b> <b>315 SEALION</b>
Displacement :	1,526 tons
Dimensions :	31½ × 27 × 17 feet
Machinery :	Diesels. B.H.P. : 6,500 = 20 kts. (surface). H.P. : 2,750 = 15 kts. (submerged)

Notes.—Perch converted at Mare Island Naval Shipyard, Sealion converted at San Francisco Naval Shipyard, to carry 160 troops each. The large cylindrical chamber abaft the conning tower (in right centre of photo) on the after deck is a water-tight storage space for the stowage of amphibious landing equipment. Both vessels were formerly fleet-type submarines of "Balao" class, see earlier page. Now classed as "Amphibious Vessels, Submarines Transport." Conversion of Sealion completed 15 Dec., 1948.

Name	Builders	Laid down	Launched	Completed
Perch Sealion	} Electric Boat Co., Groton	5 Jan. 1943	12 Sep. 1943	7 Jan. 1944
		25 Feb. 1943	31 Oct. 1943	8 Mar. 1944

Training Submarines.

9 Non-Operational Units Assigned to Naval Reserve.

1 "G" Class 206 GAR (Nov. 7, 1941)	Displacement : 1,475 tons	5 "P" Class 179 PLUNGER (July 8, 1936) 178 PERMIT (Oct. 5, 1936)	} Displacement : 1,330 tons
2 "T" Class 199 TAUTOG (Jan. 27, 1940) 198 TAMBOR (Dec. 20, 1939)	} Displacement : 1,475 tons	175 TARPON (Sept. 4, 1935)	
1 "S" Class 183 SEAL (Aug. 25, 1937)	Displacement : 1,450 tons	173 PIKE (Sept. 12, 1935) 172 PORPOISE (June 20, 1935)	} Displacement : 1,310 tons

Notes.—A total of 24 submarines are assigned to Naval Reserve Training. In addition to the above 9 vessels they comprise Drum Greenling, Guardfish, Gurnard, Haddock, Kingfish, Pargo, Puffer, Sawfish, Shad, Silversides, Steelhead and Sunfish all thirteen being units of the "Gato" class, and Dentuda and Parche, both units of the "Balao" class, see earlier pages.

Rated as **High Speed Transports (APD)**.

## 92 Converted Destroyer Escorts.

## APD Ex-DE

46	66	AMESBURY (June 5, 1943)
97	281	ARTHUR L. BRISTOL (Feb. 19, 1940)
132	716	BALDUCK (Oct. 27, 1944)
57	161	BARBER (May 20, 1943)
39	576	BARR (Dec. 28, 1943)
73	672	BASSETT (Jan. 15, 1944)
127	711	BEGOR (May 25, 1944)
109	599	BELET (March 3, 1944)
119	722	BEVERLY W. REID (March 4, 1944)
48	69	BLESSMAN (June 19, 1943)
40	637	BOWERS (Oct. 31, 1943)
139	709	BRAY (April 15, 1944)
93	234	BROCK (Jan. 20, 1944)
78	693	BULL (March 25, 1943)
79	694	BUNCH (May 29, 1943)
133	717	BURDO (Nov. 25, 1944)
65	215	BURKE (April 3, 1943)
136	720	CARPELLOTTI (March 10, 1945)
128	712	CAVALLARO (June 15, 1944)
37	53	CHARLES LAWRENCE (Feb. 16, 1943)
62	208	COFER (Sept. 6, 1943)
130	714	COOK (Aug. 26, 1944)
88	227	CREAD (Feb. 12, 1944)
87	226	CROSLLEY (Feb. 12, 1944)
38	54	DANIEL T. GRIFFIN (Feb. 25, 1943)
123	690	DIACHENKO (Aug. 15, 1944)
129	713	DONALD W. WOLF (July 22, 1944)
118	721	DON O. WOODS (Feb. 19, 1944)
113	603	EARHART (May 12, 1945)
107	597	EARLE B. HALL (March 1, 1944)
66	216	ENRIGHT (May 29, 1943)
77	677	FRAMENT (June 28, 1943)
116	606	FRANCOVICH (June 5, 1945)
42	60	GANTNER (April 17, 1943)
43	62	GEORGE W. INGRAM (May 8, 1943)
126	710	GOSELIN (May 4, 1944)
84	792	HAINES (Aug. 26, 1943)
108	598	HARRY L. CORL (Mar. 1, 1944)
80	212	HAYTER (Nov. 11, 1943)
86	794	HOLLIS (Sept. 11, 1943)
51	155	HOPPING (March 10, 1943)
124	691	HORACE A. BASS (Sept. 12, 1944)
53	211	HUBBARD (Nov. 11, 1943)
112	602	HUNTER MARSHALL (May 5, 1945)
44	63	IRA JEFFERY (May 15, 1943)
72	671	JACK C. ROBINSON (Jan. 8, 1944)

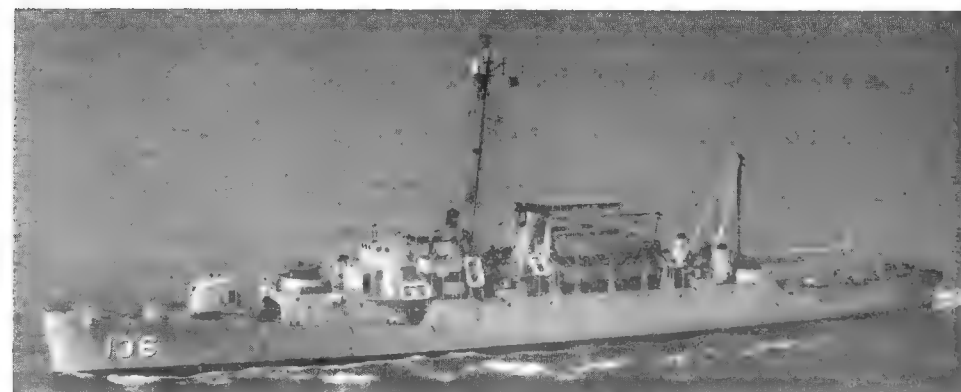
## APD Ex-DE

74	673	JOHN P. GRAY (March 18, 1944)
94	235	JOHN Q. ROBERTS (Feb. 11, 1944)
49	70	JOSEPH E. CAMPBELL (June 26, 1943)
117	674	JOSEPH M. AUMAN (Feb. 5, 1944)
110	600	JULIUS A. RAVEN (March 3, 1944)
61	207	KEPHART (Sept. 6, 1943)
91	232	KINZER (Dec. 9, 1943)
90	229	KIRWIN (June 16, 1944)
134	718	KLEINSMITH (Jan. 27, 1945)
120	687	KLINE (June 27, 1944)
101	591	KNUDSON (Feb. 5, 1944)
55	159	LANING (July 4, 1943)
45	65	LEE FOX (May 29, 1943)
60	206	LIDDLE (Aug. 9, 1943)
63	209	LLOYD (Oct. 23, 1943)
56	160	LOY (July 4, 1943)
105	595	MYERS (Feb. 15, 1944)
59	205	NEWMAN (Aug. 9, 1943)
71	670	ODUM (Jan. 19, 1944)
70	669	PAVLIC (Dec. 18, 1943)
96	237	RAY K. EDWARDS (Feb. 19, 1944)
121	688	RAYMOND W. HERNDON (July 15, 1944)
102	592	REDNOUR (Feb. 12, 1944)
52	156	REEVES (April 22, 1943)
92	233	REGISTER (Jan. 20, 1944)
100	590	RINGNESS (Feb. 5, 1944)
115	605	ROGERS BLOOD (June 2, 1945)
89	228	RUCHAMKIM (June 15, 1944)
85	793	RUNELS (Sept. 4, 1943)
76	676	SCHMITT (May 29, 1943)
122	689	SCRIBNER (Aug. 1, 1944)
50	154	SIMS (Feb. 6, 1943)
81	789	TATUM (Aug. 7, 1943)
103	593	TOLLBERG (Feb. 12, 1944)
98	282	TRUXTON (March 9, 1944)
99	283	UPHAM (March 9, 1944)
111	601	WALSH (April 28, 1945)
106	596	WALTER B. COBB (Feb. 23, 1944)
114	604	WALTER S. GORKA (May 26, 1945)
131	715	WALTER X. YOUNG (Sept. 30, 1944)
125	692	WANTUCK (Sept. 25, 1944)
75	675	WEBER (May 1, 1943)
135	719	WEISS (Feb. 17, 1945)
104	594	WILLIAM J. PATTISON (April 17, 1944)
95	236	WILLIAM M. HOBBY (Feb. 11, 1944)
69	668	YOKES (Nov. 27, 1943)

Displacement : 1,400 tons (2,130 tons full load)  
 Dimensions : 300 (w.l.), 306 (o.a.) × 37 × 12½ (max.) feet  
 Guns : 1—5 inch, 38 cal., 6—40 mm. AA.  
 Machinery : Turbo-electric, 2 shafts. S.H.P. : 12,000 = 23.6 kts.  
 Boilers : 2 Express  
 Complement 214 + 162 troops

**General Notes.**—Former destroyer escorts converted and officially rated as High-Speed Transports. Carry four LCVP (Landing Craft, Vehicle-Personnel). Seven proposed conversions abandoned. APD 82, *Borum* (DE 790) and APD 83, *Maloy* (DE 791) not converted. *Durik*, DE 666, *Jenks*, DE 665, and *Scott*, DE 214, were also originally assigned as APD (68, 67 and 64 respectively). War loss : *Bates* (APD 47, ex-DE 68). Three, APD 54, *Chase* (DE 158), APD 41, *England* (DE 635), and APD 58, *Witter* (DE 636), scrapped.

**Appearance Note.**—Those converted from "Buckley" type retained high bridge, but were given a 5-inch gunhouse forward and lattice mainmast, for twin cargo booms.



CARPELLOTTI.

1953, Skyfotos.



LLOYD (lattice main).

1953, A. &amp; J. Pavia.



CARPELLOTTI.

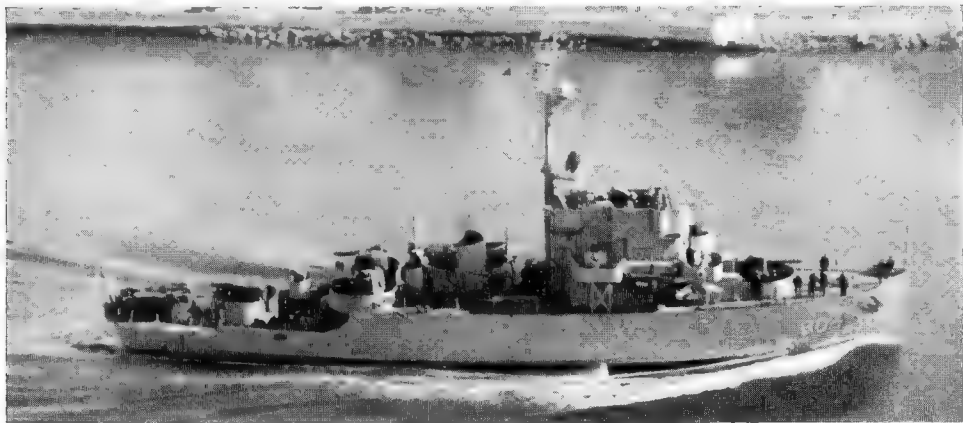
1952 Ted Stone.

U.S.A.—Patrol Vessels

Escort Patrol Vessels.

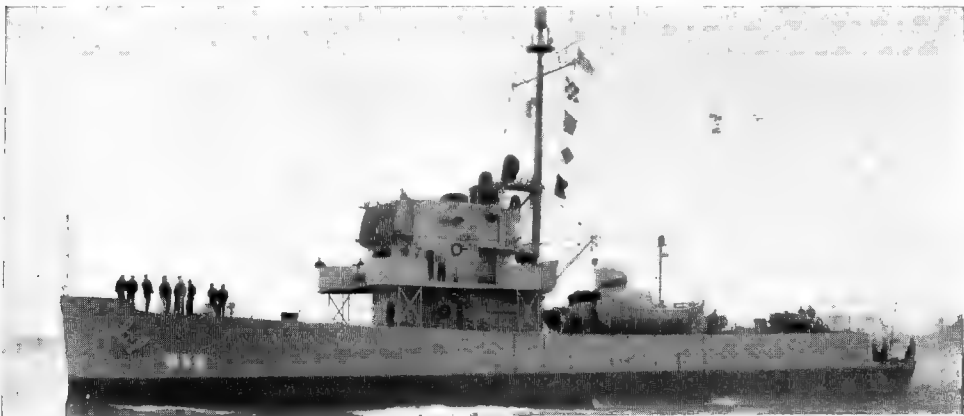
New Construction.—Contracts have been awarded for the construction of six steel hulled 800 tons, 180 feet diesel driven escort patrol vessels (PCEs). 4 to Netherlands, PCE 1604-1607, 2 to Denmark, PCE 1608-1609, under MDAP.

29 Steel Type.



PCE 904.

1952, Mr. Vagn Worm.



PCER 852.

Added 1949, U.S. Navy, Official.

PCE 842	PCE 874	PCE 899	PCER 849	PCER 855	PCEC 873
PCE 843	PCE 880	PCE 900	PCER 850	PCER 856	PCEC 877
PCE 845	PCE 892	PCE 902	PCER 851	PCER 857	PCEC 882
PCE 846	PCE 894	PCE 903	PCER 852		PCEC 886
PCE 870	PCE 895	PCE 904	PCER 853		PCEC 896
					PCEC 898

Displacement : 640 tons (903 tons full load)  
Dimensions : 180 (w.l.), 184½ (o.a.) × 33 × 9½ feet  
Guns : 1—3 inch d.p., 6—40 mm. AA. 4 D.C.T. (PCER type have 4 fewer 40 mm.)  
Machinery : Diesel, 2 shafts. B.H.P. : 2,400 = 16 kts.

Notes.—Built 1942-43 by Pulman Standard Mfg. Co., Albina Engine & Machinery Works and Willamette Iron & Steel Corpn. "PCER" type carry hospital equipment and personnel, complement being 107, with accommodation for 57 patients. PCE 827-841 were transferred to Royal Navy, but subsequently placed on sale list. Others were transferred to China, Cuba and Mexico. PCE 873-898 are redesignated PCEC, having been reassigned to amphibious forces, and have had additional equipment installed which removes them from the category "Patrol" vessels and places them in the category "Escort Control Vessels".

Patrol Motor Gunboats.

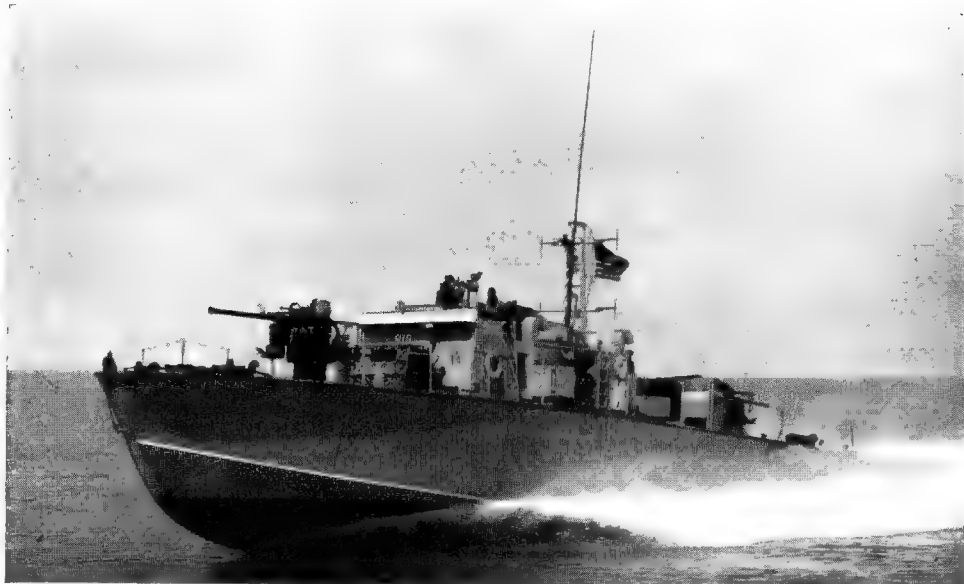
3 New Construction.

Dimensions : Length : 110 feet  
Guns : 1—60 mm. mortar, 2—40 mm. AA., 4—50 cal. M.G.  
Machinery : Diesel

New Construction.—9 Patrol Motor Gunboats, 110 foot, wooden, diesel-driven, carrying 1—60 mm. mortar, 2—40 mm. guns, 4—50 cal. M.G. are being built by MacDonell Boats, St. Mary's, Ga., now Gorgia Shipbuilding Corp. at a cost of \$1,316,000. PGM 33-38 for Philippine Navy. Basic hull design of former 110-foot submarine chasers. Three others of SC design being built by South Coast Co., Newport Beach, at a cost of \$203,500.

Note.—PGM 31 was transferred to Nationalist China in 1954.

Motor Torpedo Boats.



PT 810.

1951, courtesy, "Our Navy."

PT 809 (Electric Boat Co., Groton) 7 Aug. 1950	PT 811 (John Trumpy & Sons, Annapolis) 30 Nov. 1950
PT 810 (Bath Iron Works Corporation) 2 June 1950	PT 812 (Philadelphia Naval Shipyard) 1 Feb. 1951

Displacement : 58 tons light (75 tons full load)  
Dimensions : 85 (w.l.), 105 (o.a.) × 22 × 6 (max.) feet  
Guns : 2—40 mm., 4—20 mm.  
Machinery : Packard engines. 4 shafts. S.H.P. : 10,000 = 42 kts.  
Complement : 17

Notes.—Built to 4 experimental designs by four different builders. Of all aluminium construction. Larger than wartime PTs with greater displacement, range, fire power and stability. PT 809 launched Aug. 7, 1950. PT 811 launched Nov. 30, 1950, and accepted 6 Mar., 1951. PT 810 is an aluminium hulled boat of half-welded and half-riveted structure. Constitute Motor Torpedo Boat Squadron One. Each of different hull design and each embodies different characteristics. Propelled by 4 engines instead of 3 as in older boats. All use gasoline fuel. Launch dates above.

PT 613, PT 616, PT 619 and PT 620 were loaned to Korea Jan. 1952. PT 613 was destroyed in Sep. 1952 while on loan to Korean Navy

## Submarine Chasers.

## 84 Steel Type.



PC 564.

1954, U.S. Navy, Official.

## 8 Albina Engine &amp; Machinery Works

PC 569 (22 Jan. 1942)  
PC 571 (2 Feb. 1942)  
PC 572 (28 Feb. 1942)  
PC 579 (29 Apr. 1942)  
PC 580 (29 Apr. 1942)  
PC 581 (8 July 1942)  
PC 817 (4 Mar. 1943)  
PC 1077 (29 July 1942)

## 5 Brown S.B. Co.

PC 565 (27 Feb. 1942)  
PC 566 (21 Mar. 1942)  
PC 467 (11 Apr. 1942)  
PC 568 (25 Apr. 1942)  
PC 1252 (30 Sep. 1942)

## 10 Commercial Iron Works

PC 597 (7 Sep. 1942)  
PC 776 (27 Oct. 1942)  
PC 777 (11 Nov. 1942)  
PC 778 (26 Nov. 1942)  
PC 779 (7 Dec. 1942)  
PC 780 (16 Dec. 1942)  
PC 781 (24 Dec. 1942)  
PC 782 (31 Dec. 1942)  
PC 785 (23 Jan. 1943)  
PC 808 (27 Nov. 1943)

## 18 Consolidated Shipbuilding Corpn.

PC 483 (25 Oct. 1941)  
PC 484 (6 Dec. 1941)  
PC 486 (25 Jan. 1942)  
PC 487 (28 Feb. 1942)  
PC 564 (12 Apr. 1942)  
PC 601 (23 May 1942)  
PC 602 (13 June 1942)  
PC 603 (30 June 1942)  
PC 1191 (25 July 1942)  
PC 1193 (29 Aug. 1942)  
PC 1196 (24 Oct. 1942)  
PC 1198 (12 Dec. 1942)  
PC 1201 (14 Feb. 1943)  
PC 1209 (7 Oct. 1943)  
PC 1237 (3 Apr. 1943)  
PC 1240 (26 June 1943)  
PC 1546 (20 Jan. 1944)  
PC 1547 (8 Feb. 1944)

## 1 Dravo Corporation

PC 592 (27 June 1942)

## 4 Luders Marine Construction Co.

PC 606 (8 Jan. 1943)  
PC 1212 (23 Apr. 1943)  
PC 1213 (22 May 1943)  
PC 1216 (27 Aug. 1943)

## 10 Defoe Boat &amp; Motor Works

PC 586 (15 July 1942)  
PC 1119 (11 Aug. 1942)  
PC 1120 (24 Aug. 1942)  
PC 1135 (3 Feb. 1943)  
PC 1138 (14 Apr. 1943)  
PC 1140 (14 June 1943)  
PC 1141 (22 June 1943)  
PC 1142 (20 Aug. 1943)  
PC 1145 (27 Oct. 1943)  
PC 1149 (11 Jan. 1944)

## 7 George Lawley &amp; Sons

PC 461 (23 Dec. 1941)  
PC 465 (28 Mar. 1942)  
PC 470 (27 June 1942)  
PC 617 (18 July 1942)  
PC 618 (1 Aug. 1942)  
PC 619 (15 Aug. 1942)  
PC 1087 (21 Aug. 1943)

## 2 Gibbs Gas Engine Co.

PC 1181 (15 Apr. 1943)  
PC 1186 (27 Sep. 1943)

## 1 Jeffersonville Boat &amp; Machine Co.

PC 560 (17 Mar. 1942)

Displacement: 280 tons (450 tons full load)  
Dimensions: 170 (w.l.), 173½ (o.a.) × 23 × 7½ (mean, 10½ (max.) feet  
Guns: 1—3 inch d.p., 1—40 mm. AA., 2 to 5—20 mm. AA., 4 D.C.T.  
Machinery: 2 G.M. 2-stroke Diesels. 2 shafts. B.H.P.: 2,560 to 2,880 = 20 kts.  
Complement: 80

Notes.—All the above are of the same general design with minor differences. Units of this class have been transferred to various other navies. 18 of these vessels are now rated as Submarine Chasers (Control) (PCC)—see following page. PC 1086, 1130, 1139, 1143, 1144, 1146, 1167, 1171 were transferred to France under MDAP 1951 and sent to Indo-China. PC 485 and PC 600 transferred to Republic of Korea Navy. PC 495, 570, 575, 609, 616, 1185, 1218 and 1253 transferred to Thailand Navy. PC 786, 1078, 1182, 1208, 1232, 1233, 1254, and 1262 were transferred to Nationalist China in 1954.

## 18 Steel (Control) Type.

## 3 Albina

PCC 582 (15 July 1942)  
PCC 1079 (25 Aug. 1942)  
PCC 1081 (29 Aug. 1942)

## 3 Defoe

PCC 1125 (15 Oct. 1942)  
PCC 1136 (5 Mar. 1943)  
PCC 1137 (29 Mar. 1943)

## 6 L. D. Smith

PCC 589 (7 June 1942)  
PCC 1177 (18 Sep. 1943)  
PCC 1178 (5 Oct. 1943)  
PCC 1180 (27 Nov. 1943)  
PCC 1230 (10 Mar. 1943)  
PCC 1260 (16 Jan. 1943)

## 1 Nashville

PCC 1244 (8 May 1943)

## 2 Sullivan

PCC 1169 (16 Oct. 1943)  
PCC 1231 (12 Dec. 1942)

## 1 Brown

PCC 1251 (12 Sep. 1942)

## 2 Lawley

PCC 463 (27 Feb. 1942)  
PCC 466 (29 Apr. 1942)

Displacement: 280 tons standard (450 tons full load)  
Dimensions: 173½ (o.a.) × 23 × 10½ (max.) feet  
Guns: 1—3 inch d.p., 1—40 mm. AA., 2—20 mm. AA., 4 D.C.T.  
Machinery: Diesels. 2 shafts. B.H.P.: 2,800 = 20 kts.  
Complement: 80

Notes.—PCC 1168 was transferred to Nationalist China in 1954. PCC 469 is on the disposal list.

## 1 Steel Type (ex-Minesweeper).

## PC 1590 (ex-Constant, ex-AM 86)

Builders: Commercial Iron Works  
Launched: 9 May 1942

Displacement: 295 tons  
Dimensions: 170 (w.l.), 173½ (o.a.) × 23 × 7½ feet  
Guns: 1—3 inch. 50 cal., d.p., 1—40 mm. AA.  
Machinery: Diesel. 2 shafts. B.H.P.: 1,770 = 16.5 kts.  
Complement: 65

Notes.—Formerly a minesweeper but reclassified in 1944, and subsequently assigned to Naval Reserve. War loss: PC 1603.

## 14 Wooden Type.



1944, U.S. Navy, Official

## 1 Burger Boat Co.

PCS 1423 (24 Jan. 1944)

## 1 Harbor B.B. Co.

PCS 1444 (ex-YMS 474)

## 1 Robert Jacob, Inc.

PCS 1392 (13 Oct. 1943)

## 8 Wheeler S.B. Corpn.

PCS 1376 PCS 1384  
PCS 1378 PCS 1385  
PCS 1380 PCS 1386  
PCS 1383 PCS 1387

## 1 Gibbs Gas Engine Co.

PCS 1431 (24 Mar. 1944)

## 1 Hubbard's South Coast Co.

PCS 1401 (ex-YMS 452)

## 1 Stadium Yacht Basin

PCS 1413 (24 July 1943)

Displacement: 251 tons (338 tons full load)  
Dimensions: 136 × 24½ × 8½ (max.) feet  
Guns: 1—3 inch d.p., 1—40 mm. AA., 2—20 mm. AA., Many D.C.  
Machinery: 2 G.M. Diesels. B.H.P.: 800 = 14 kts.  
Complement: 60

Notes.—Built 1942-43. Five vessels of this class were reclassified as minesweepers and now bear names *Sanderling*, *Swallow*, *Swan*, *Verdine*, *Waxbill*, see earlier page. Former PCS 1465 is now *Minah* AMCU 14, see page 427. PCS 1426 and PCS 1448 were loaned to Republic of Korea Navy, 9 June 1952, PCS 1445 and 1446 26 May 1952.

## U.S.A.—Fleet Minesweepers

### Ocean Minesweepers (AM).

#### 59 "Auk" Class.



SPRIG.

1952, A. & J. Pavia.

14 American S.B. Co.

#### AM

112 SEER (May 23, 1942)  
116 SPEED (April 18, 1942)  
384 SPRIG (Sept. 15, 1944)  
114 STAFF (June 17, 1942)  
118 STEADY (June 6, 1942)  
117 STRIVE (May 16, 1942)  
383 SURFBIRD (Aug. 31, 1944)  
119 SUSTAIN (June 23, 1942)  
385 TANAGER (Dec. 9, 1944)  
386 TERCEL (Dec. 16, 1944)  
387 TOUCAN (Sept. 15, 1944)  
388 TOWHEE (Jan. 9, 1945)  
389 WAXWING (March 10, 1945)  
390 WHEATEAR (April 21, 1945)

Associated Shipbuilders

322 SPEAR (Feb. 25, 1943)  
323 TRIUMPH (Feb. 25, 1943)  
324 VIGILANCE (April 5, 1943)

4 Defoe S.B. Co.

58 BROADBILL (May 21, 1942)  
59 CHICKADEE (July 20, 1942)  
60 NUTHATCH (Sept. 16, 1942)  
60 PHEASANT (Oct. 24, 1942)

Displacement : 890 tons (1,250 tons full load)  
Dimensions : 215 (w.l.), 220½ (o.a.) × 32½ × 11 (max.) feet  
Guns : 1—3 inch d.p., 2 or 4—40 mm. AA.  
Machinery : Diesel, with electric drive. 2 shafts. B.H.P. : 2,976-3,532 = 18 kts  
Complement : 105 (war)

General Note.—Prevail (AM 107), Pursuit (AM 108), Requisite (AM 109) and Sheldrake (AM 62) of this class were reclassified as survey ships (AGS) early in 1952 (see later page).

#### I "Raven" Type.

#### AM 55 RAVEN

Builders : Norfolk Navy Yard  
Launched : 24 Aug. 1940  
Displacement : 810 tons (1,040 tons full load)  
Dimensions : 215 (w.l.), 220½ (o.a.) × 32 × 9½ (mean), 10½ (max.) feet  
Guns : 1—3 inch d.p., 2—40 mm. AA.  
Machinery : Diesel. 2 shafts. B.H.P. : 1,800 = 17 kts.  
Complement : 105

Note.—Otherwise similar to "Auk" class.

13 General Engineering & D.D. Co.

#### AM

340 ARDENT (June 22, 1943)  
314 CHAMPION (Dec. 12, 1942)  
315 CHIEF (Jan. 5, 1943)  
316 COMPETENT (Jan. 9, 1943)  
317 DEFENSE (Feb. 18, 1943)  
318 DEVASTATOR (April 19, 1943)  
319 GLADIATOR (May 7, 1943)  
100 HEED (June 19, 1942)  
101 HERALD (July 4, 1942)  
320 IMPECCABLE (May 21, 1943)  
102 MOTIVE (Aug. 17, 1942)  
103 ORACLE (Sept. 30, 1942)  
64 STARLING (April 11, 1942)

9 Gulf S.B. Corpn.

341 DEXTROUS (Jan. 17, 1943)  
379 ROSELLE (Aug. 29, 1945)  
380 RUDDY (Oct. 29, 1944)  
381 SCOTER (Sept. 26, 1945)  
383 SHOVELER (Dec. 10, 1945)  
126 TOKEN (March 28, 1942)  
127 TUMULT (April 19, 1942)  
128 VELOCITY (April 19, 1942)  
131 ZEAL (Sept. 15, 1942)

2 John H. Mathis Co.

#### AM

120 SWAY (Sept. 29, 1942)  
122 SWIFT (Dec. 5, 1942)

1 Norfolk Navy Yard

57 AUK (Aug. 26, 1941)

2 Pennsylvania Shipyard

104 PILOT (July 5, 1942)  
105 PIONEER (July 26, 1942)

9 Savannah Machine & Foundry Co.

372 MURRELET (Dec. 29, 1944)  
373 PEREGRINE (Feb. 17, 1945)  
374 PIGEON (March 28, 1945)  
375 POCHARD (June 11, 1944)  
376 PTARMIGAN (July 15, 1944)  
377 QUAIL (Aug. 20, 1944)  
378 REDSTART (Oct. 18, 1944)  
123 SYMBOL (July 2, 1942)  
124 THREAT (Aug. 15, 1942)

2 Winslow Marine Ry. & S.B. Co.

110 REVENGE (ex-Right, Nov. 7, 1942)  
111 SAGE (Nov. 21, 1942)

### Fleet Minesweepers (AM).

#### 57 "Admirable" Class.

5 American S.B. Co.

#### AM

223 DOUR (March 25, 1944)  
224 EAGER (June 10, 1944)  
255 JUBILANT (Feb. 20, 1943)  
256 KNAVE (March 13, 1943)  
261 MAINSTAY (July 31, 1943)

9 Associated Shipbuilders

304 SCURRY (ex-Skurry, Oct. 11, 1943)  
302 SIGNET (Aug. 16, 1943)  
303 SKIRMISH (Aug. 16, 1943)  
306 SPECTER (Feb. 15, 1944)  
307 STAUNCH (Feb. 15, 1944)  
308 STRATEGY (March 28, 1944)  
309 STRENGTH (March 28, 1944)  
310 SUCCESS (May 11, 1944)  
311 SUPERIOR (May 11, 1944)

5 General Engineering & D.D. Co.

283 RANSOM (Sept. 18, 1943)  
284 REBEL (Oct. 28, 1943)  
285 RECRUIT (Dec. 11, 1943)  
288 REIGN (May 29, 1944)  
289 REPORT (Aug. 8, 1944)

2 Gulf S.B. Corpn.

#### AM

269 OPPONENT (June 12, 1943)  
280 PROWESS (Feb. 17, 1944)  
2 Puget Sound Bridge Co.  
232 EXECUTE (June 22, 1944)  
233 FACILITY (June 22, 1944)

4 Savannah Machine & Foundry Co.  
249 INCREDIBLE (Nov. 21, 1943)  
252 INSTILL (March 5, 1944)  
253 INTRIGUE (April 8, 1944)  
254 INVADE (Feb. 6, 1944)

6 Tampa S.B. Co.

214 CRAG (ex-Craig, March 21, 1943)  
215 CRUISE (March 21, 1943)  
218 DENSITY (Feb. 6, 1944)  
219 DESIGN (Feb. 6, 1944)  
220 DEVICE (May 21, 1944)  
221 DIPLOMA (May 21, 1944)

13 Williams Iron & Steel Corpn.

159 CHANGE (Dec. 15, 1942)  
160 CLAMOUR (Dec. 24, 1942)

Displacement : 650 tons (945 tons full load)  
Dimensions : 180 (w.l.), 184½ (o.a.) × 33 × 10 (max.) feet  
Guns : 1—3 inch d.p., 4—40 mm. AA.  
Machinery : Diesel. 2 shafts. B.H.P. : 1,710 = 15 kts.  
Complement : 104

Notes.—Appearance varies according to builder ; some have a funnel. *Crag* and *Cruise*, completed by Charleston Navy Yard, are armed only with 2—40 mm. AA. *Salute* was lost in Second World War. *Pirate* (AM 275) and *Pledge* (AM 277) of this class struck mines and sank off Wonsan, Korean east coast, on Oct. 12, 1950. 34 transferred to Russian Navy and 12 to Chinese Navy.

### Wooden Minesweepers (AM).

#### 59 "Agile" Class + 10 AM 498 Class + 4 (1954) + 3 (1955)

#### AM

421 AGILE  
422 AGGRESSIVE (4 Oct. 1952)  
423 AVENGE (15 Mar. 1953)  
424 BOLD (28 Mar. 1953)  
425 BULWARK (28 May 1953)  
426 CONFLICT (1953)  
427 CONSTANT (14 Feb. 1952)  
428 DASH (20 Sep. 1952)  
429 DETECTOR (Dec. 1952)  
430 DIRECT  
431 DOMINANT  
432 DYNAMIC (1953)  
433 ENGAGE (ex-Delusive)  
434 EMBATTLE  
435 ENDURANCE  
436 ENERGY (13 Feb. 1953)  
437 ENHANCE (11 Oct. 1952)

#### AM

438 ESTEEM (20 Dec. 1952)  
439 EXCELL  
440 EXPLOIT  
441 EXULTANT  
442 FEARLESS  
443 FIDELITY  
444 FIRM  
445 FORCE  
446 FORTIFY  
447 GUIDE (17 Apr. 1954)  
448 ELUSIVE (12 July 1952)  
449 IMPERVIOUS (29 Aug. 1952)  
455 IMPLICIT (1 Aug. 1953)  
456 INFLECT (16 Oct. 1953)  
457 LOYALTY (22 Nov. 1953)  
458 LUCID (14 Nov. 1953)  
459 NIMBLE

#### AM

460 NOTABLE  
461 OBSERVER  
462 PINNACLE  
463 PIVOT  
464 PLUCK (6 Feb. 1954)  
465 PRESTIGE  
466 PRIME  
467 REAPER  
468 RIVAL  
469 SAGACITY  
470 SALUTE  
471 SKILL  
472 VALOR  
473 VIGOR  
474 VITAL  
475 CONQUEST  
476 GALLANT

#### AM

490 LEADER  
491 PERSISTANT  
492 PLEDGE  
493 STALWART  
494 STURDY  
495 SWERVE  
496 VENTURE  
497  
498  
499  
500  
501  
502  
503  
504  
505  
506  
507

1953  
Programme

Displacement : 665 tons light (750 tons full load)  
Dimensions : 165 (w.l.), 171 (o.a.) × 35 × 9½ (11 (max.) feet  
Machinery : 4 Packard diesels. 2 shafts. Speed 15-5 kts.  
Complement : 72 to 74

Notes.—Wooden hulls and non-magnetic equipment. Range of 2,400 miles at 12 kts. Diesels of non-magnetic stainless steel alloy ; controllable pitch propellers. (*Aggressive*, AM 422, built by Luders Marine Const. Co., Stamford, Conn. \$3,500,000, laid down 25 May 1951, commissioned 25 Nov. 1953. *Elusive*, AM 448, built by Martinlock S.B. Co., San Diego, commissioned 14 Nov. 1953. *Bold*, AM 424, *Bulwark*, AM 425, built by Norfolk Navy Shipyard, remainder by private yards. Nos. 450-454, 475-487 to foreign countries under MDAP. No. U.S. names allocated. 8 to France, 6 to Netherlands, 4, to Portugal. Further new construction for U.S. Navy provides for four 165 foot AMS under 1954 fiscal programme. Three more 165 foot AMS requested in 1955 fiscal appropriations.



## Auxiliary Motor Minesweepers (AMS).

## 22 Non-Magnetic + 12 New Construction MDAP.

AMS 121 BLUEBIRD 122 CORMORANT 190 FALCON 191 FRIGATE BIRD 192 HUMMING BIRD	AMS 193 JACANA 194 KINGBIRD 195 LIMPIN 196 MEADOWLARK	AMS 197 PARROT 198 PEACOCK 199 PHOEBE 210 MEADOWLARK	AMS 201 SHRIKE 202 SPOONBILL 203 THRASHER 204 THRUSH	AMS 205 VIREO 206 WARBLER 207 WHIPOORWILL 208 WIDGEON 209 WOODPECKER
Displacement : 335 tons <i>light</i> (375 tons <i>full load</i> )				
Dimensions : 138 (pp), 144 (o.a.) × 27 × 8½ feet				
Machinery : General Motors diesels. 2 shafts. B.H.P. : 880 = 14 kts.				
Complement : 39				

Notes.—Auxiliary motor minesweeper of wooden construction. AMS 121 and AMS 122 (commissioned 14 Aug. 1953) built by Mare Island Naval Shipyard, 310 tons *light*, Packard engines, B.H.P. : 1,200. New type of vessel constructed throughout of materials with the lowest possible magnetic attraction to attain the greatest possible safety factor when sweeping for magnetic mines. Only named vessels AMS 121, 122, 190-209 will be commissioned into U.S. Navy. Remainder 61-154, 170, 171, 210-221 building for NATO to foreign countries under MDAP.

18 to Italy : AMS 72-76, 79-82, 88-90, 133-138. 28 to Belgium : AMS 63-65, 77, 78, 101-104, 148-154, 169-. 4 to Denmark : AMS 127-130. 36 to France : AMS 66-71, 83-87, 93-99, 113-120, 123-126, 139-144. 14 to Netherlands : AMS 100, 105-112, 167-171. 2 to Norway : AMS 131, 132. 8 to Portugal : AMS 60 (ex-U.S.S. *Adjutant*), 61, 62, 91, 92, 145-147. 1 to Spain : AMS 189. AMS 155 to 166 were reserved for German-built vessels but order and numbers were cancelled.

## 55 "Albatross" Class.



CURLEW.

1952, U.S. Navy, Official.

AMS 1 ALBATROSS (ex-YMS 80) 41 BARBET (ex-YMS 45) 2 BOBOLINK (ex-YMS 164) 42 BRAMBLING (ex-YMS 109) 43 BRANT (ex-YMS 113, Feb. 13, 1942) 3 BUNTING (ex-YMS 170) 4 CARDINAL (ex-YMS 179) 40 CHATTERER (ex-YMS 415) 5 CONDOR (ex-YMS 192) 44 COURLAN (ex-YMS 114) 6 COURSER (ex-YMS 201) 45 CROSSBILL (ex-YMS 120, Apr. 4, 1942) 7 CROW (ex-YMS 215) 8 CURLEW (ex-YMS 218) 6 EGRET (ex-YMS 136) 10 FIRECREST (ex-YMS 231) 11 FLAMINGO (ex-YMS 238) 9 FLICKER (ex-YMS 219) 47 FULMAR (ex-YMS 193, Jan. 2, 1943)	AMS 12 GOLDFINCH (ex-YMS 306) 13 GRACKLE (ex-YMS 312) 14 GROSSBEAK (ex-YMS 317) 15 GROUSE (ex-YMS 321) 16 GULL (ex-YMS 324) 17 HAWK (ex-YMS 362, May 22, 1943) 18 HERON (ex-YMS 369) 19 HORNBILL (ex-YMS 371) 20 HUMMER (ex-YMS 372) 21 JACKDAW (ex-YMS 373) 22 KITE (ex-YMS 374) 48 LAPWING (ex-YMS 268) 23 LARK (ex-YMS 376) 24 LINNET (ex-YMS 395) 49 LORIKEET (ex-YMS 271) 27 MERGANSER (ex-YMS 417) 23 MOCKINGBIRD (ex-YMS 419) 50 NIGHTINGALE (ex-YMS 290, Feb. 27, 1942)	AMS 28 OSPREY (ex-YMS 422) 29 OSTRICH (ex-YMS 430) 32 PELICAN (ex-YMS 441) 33 PLOVER (ex-YMS 442) 34 REDHEAD (ex-YMS 443) 57 REDPOLE (ex-YMS 294) 51 REEDBIRD (ex-YMS 291) 52 RHEA (ex-YMS 299) 53 ROBIN (ex-YMS 311) 54 RUFF (ex-YMS 327, Dec. 5, 1942) 35 SANDERLING (ex-YMS 446) 55 SEAGULL (ex-YMS 402) 58 SISKIN (ex-YMS 425) 36 SWALLOW (ex-YMS 461) 37 SWAN (ex-YMS 470) 56 TURKEY (ex-YMS 444) 38 VERDIN (ex-YMS 471) 39 WAXBILL (ex-YMS 479)
Displacement : 270 tons (350 tons <i>full load</i> )		
Dimensions : 136 × 24½ × 8 (max.) feet		
Guns : 1—3 inch, 2—20 mm. AA., 2 D.C.T.		
Machinery : 2 G.M. : 1,000 = 15 kts.		
Fuel : 16 tons		
Complement : 50		

General Notes.—Wood. Various units of this type will be found in other navies. Magpie (AMS 25) and Partridge (AMS 31) of this class struck floating mines and sank off the Korean east coast on Oct. 1, 1950, and Feb. 2, 1951, respectively.

Appearance Notes.—Of similar design but AMS 1, 41-45 two funnels; AMS 2-29, 31-34, 40, 46-58 one funnel (see photo); AMS 35-39 no funnel.

## Coastal Minesweepers, Mine Hunters (AMCU).

## New Construction.

## 1 AMCU (Mine Hunter)

AMCU  
43

Displacement : 358 tons *full load*  
Dimensions : Length : 165 feet  
Machinery : Diesels. 2 shafts

Notes.—One Mine Hunter (AMCU) is being built under the 1954 fiscal programme.

## 25 Underwater Locator Type.

## AMCU

## 14 MINAH (ex-AMC 204, ex-PCS 1465)

Builders : Astoria Marine Construction Co.  
Launched : 27 Dec., 1943

Displacement : 267 tons  
Dimensions : 130 (w.l.) 136 (o.a.) × 23½ × 8½ (max.) feet  
Guns : 1—3 inch d.p., 1—40 mm. AA.  
Machinery : G.M. Diesel. 2 shafts. B.H.P. : 1,000 = 14 kts.  
Complement : 47

Notes.—Formerly a patrol vessel (submarine chaser) of the PCS type. Similar to AMS 35 type in appearance. Reclassified AMCU 14 in 1952.

## AMCU

## 12 HARKNESS (ex-AGSC 12, ex-YMS 242)

Displacement : 270 tons (350 tons *full load*)  
Dimensions : 136 (o.a.) × 24½ × 8 (max.) feet  
Guns : 1—3 inch  
Machinery : G.M. Diesels. 2 shafts. B.H.P. : 1,000 = 15 kts.  
Complement : 34

Notes.—Reclassified as AMCU in 1952. Formerly classed as Coastal Surveying Vessels (AGSC). Built by Tacoma B.B. and South Coast Co in 1942-43. *Simon Newcomb* driven aground, August 1949. Scrapped Jan. 31, 1950. *John Blish* and *Littlehales* also scrapped.

## AMCU

## 34 ORTOLAN (ex-YMS 319)

Displacement : 215 tons *standard*  
Dimensions : 136 × 24½ × 6 feet  
Machinery : G.M. Diesels. 2 shafts. B.H.P. : 1,000 = 15 kts.

Notes.—Former YMS built by South Coast Co. converted into underwater locator and reclassified as AMCU in 1952. All four above vessels have the same basic hull design.

## AMCU

## 11 (ex-LCI (L) 515)

Displacement : 246 tons (393 tons *full load*)  
Dimensions : 153 (w.l.), 157 (o.a.) × 23½ × 5½ × (max.) feet  
Guns : 2—20 mm. AA.  
Machinery : G.M. Diesel. 2 shafts. B.H.P. : 1,800 = 14 kts.  
Complement : 41

Notes.—Built 1943-44. Formerly an infantry landing craft. Same type as ships below, but unnamed, and converted earlier. AMC (U) 10 was stricken from the Navy List in 1951.

## AMCU

16 AVOCET (ex-LSIL 653)  
17 BLUE JAY (ex-LSIL 654)  
18 CHAFFINCH (ex-LSIL 694)  
19 CHEWINK (ex-LSIL 701)  
20 CHIMANGO (ex-LSIL 703)  
21 COCKATOO (ex-LSIL 709)  
22 COTINGA (ex-LSIL 776)

## AMCU

24 GOLDCREST (ex-LSIL 869)  
25 JACAMAR (ex-LSIL 870)  
26 KESTREL (ex-LSIL 874)  
28 LONGSPUR (ex-LSIL 884)  
29 MAGPIE (ex-LSIL 944)  
30 MALLARD (ex-LSIL 963)

## AMCU

33 ORIOLE (ex-LSIL 973)  
35 OWL (ex-LSIL 982)  
37 RAIL (ex-LSIL 1022)  
38 SANDPIPER (ex-LSIL 1008)  
39 SENTINEL (ex-LSIL 1052)  
41 SKIMMER (ex-LSIL 1093)  
42 SPARROW (ex-LSIL 1098)

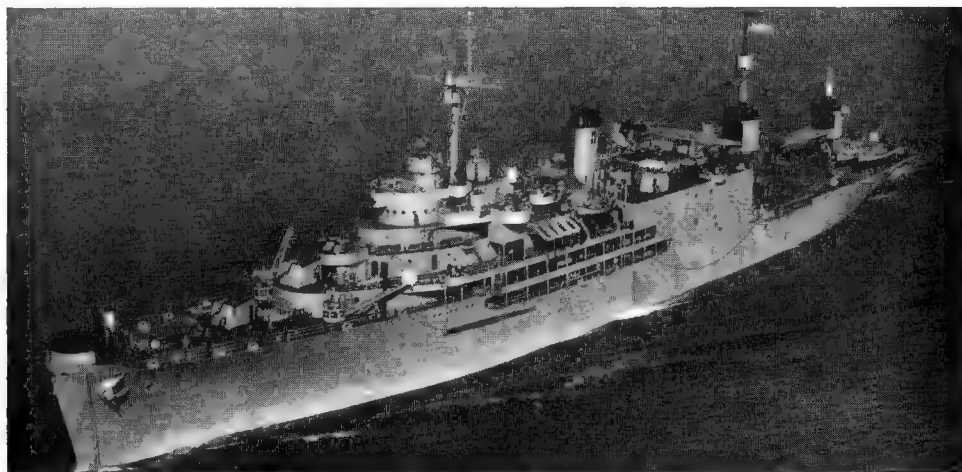
Displacement : 210 tons *light* (387 tons *full load*)  
Dimensions : 153 (w.l.), 159 (o.a.) × 23½ × 5½ feet  
Machinery : G.M. Diesels. 2 shafts. B.H.P. : 1,800 = 14 kts.  
Complement : 34

Notes.—Former LSLI (Infantry Landing Ships Large). Converted into underwater locator minesweepers and reclassified as AMCU; 1952. Latterly known as Mine Hunters.

On 1st July 1954 names and classification of AMCU were withdrawn from *Accentor* (AMCU 15) now restored to designation and number LSIL 652, from *Dunlin* (AMCU 23) to LSIL 777, *Kildeer* (AMCU 27) to LSIL 883, *Medrick* (AMCU 31) to LSIL 966, *Minivet* (AMCU 32) to LSIL 969, *Partridge* (AMCU 36) to LSIL 1001 and *Shearwater* (AMCU 40) to LSIL 882. Conversion to mine hunters was cancelled.

## U.S.A.—Guided Missile and Atomic Energy Ships and Seaplane Tenders

### Guided Missile Ship (AVM) and Seaplane Tenders (AV).



PINE ISLAND.

1954, Ted Stone.



NORTON SOUND.

1952, U.S. Navy, Official.

**AVM 1 NORTON SOUND** (ex-AV 11, Nov. 28, 1943)  
**AV 7 CURRITUCK** (Sep. 11, 1943)

Displacement : 9,106 tons (15,092 tons full load)  
Dimensions : 520 (w.l.), 540½ (o.a.) × 69½ × 26 feet  
Guns : 4—5 inch, 38 cal., 20—40 mm. AA. (Norton Sound : 1—5 inch, 38 cal., 12—40 mm. AA.)  
Machinery : Geared turbines (Parsons in Currituck), Allis-Chalmers in others. 2 shafts. S.H.P. : 12,000 = 19·2 kts.  
Complement : 1,247 (war)

**Notes.**—Currituck built by Philadelphia Navy Yard, others by Todd Shipyards, Los Angeles. Norton Sound has been adapted as the Navy's seagoing rocket laboratory ship and equipped for experiments with guided missiles. Two forward 5-inch guns removed to make space for helicopter platform; and stern crane removed. Ship has carried out experiments in the Pacific, making practice firings with "loon" missiles, American versions of the wartime V-1 "buzz" bombs, and with shipboard launching of the Navy's "Aerobee," a true rocket which has attained altitudes up to 78 miles and speeds estimated at about 2,000 miles an hour.

**AV 17 CUMBERLAND SOUND** (Feb. 23, 1944)  
**15 HAMLIN** (Jan. 11, 1944)

Displacement : 8,510 tons (14,000 tons full load)  
Dimensions : 492 (o.a.) × 69½ × 26 (max.) feet  
Guns : 2—5 inch, 38 cal., 12—40 mm. AA., 16—20 mm. AA.  
Machinery : Allis-Chalmers geared turbines. 1 shaft. S.H.P. : 8,500 = 18·7 kts.  
Boilers : 2 Foster-Wheeler  
Complement : 662 (peace)

**AV 14 KENNETH WHITING** (Dec. 15, 1943)  
**16 ST. GEORGE** (Feb. 14, 1944)

**Notes.**—All modified Maritime Commission C3-S-A1 Todd-Pacific type conversions, single screw. Only Kenneth Whiting in commission.

### Atomic Energy Ship and Seaplane Tenders (AV)



CURTISS.

Added 1950, U.S. Navy, Official.

**AV 4 CURTISS** (April 20, 1940)

Displacement :  
Dimensions :  
Guns :  
Aircraft :  
Machinery :  
Boilers :  
Complement :

**AV 5 ALBEMARLE** (July, 13 1940)

8,671 tons (13,475 tons full load)  
508 (w.l.), 527½ (o.a.) × 69½ × 21½ (max.) feet  
4—5 inch, 38 cal., 14—40 mm. AA.  
25  
Parsons geared turbines. 2 shafts. S.H.P. : 12,000 = 19·7 kts.  
4 Babcock & Wilcox Express  
1,195 (war)

**Notes.**—Built as large seaplane tenders by New York S.B. Corp., under 1937 and 1938 Programmes, respectively, with space for Flag and Fleet Air Wing staffs. Curtiss is no longer employed as a seaplane tender, having been modified for use by the Atomic Energy Commission. Modifications include the installation of shops and equipment for A.E.C. within former hangar area.



TANGIER.

1944, U.S. Navy, Official.

**AV 9 POCOMOKE** (ex-Exchequer, June 8, 1940)

Displacement : 8,560 tons (14,800 tons full load)  
Dimensions : 465 (pp), 492 (o.a.) × 69½ × 24½ (max.) feet  
Guns : 1—5 inch, 38 cal., 4—3 inch, 50 cal., 8—40 mm. AA.  
Machinery : Geared turbines (General Electric in Pocomoke ; De Laval in Tangier). 1 shaft. S.H.P. : 8,500 = 18·4 kts.  
Boilers : 2 Foster-Wheeler  
Oil fuel : 1,417 tons  
Complement : 857

**AV 8 TANGIER** (ex-Sea Arrow), 1939

**Notes.**—Modified C 3-Cargo (S) type mercantile conversions. Out of commission, in reserve. Tangier built by Moore DD.. Corp.

**AV 10 CHANDELEUR**

Displacement : 9,031 tons (14,200 tons full load)  
Dimensions : 492 (o.a.) × 69½ × 23½ (max.) feet  
Guns : 1—5 inch, 38 cal., 4—3 inch, 50 cal.  
Machinery : General Electric geared turbines. 1 shaft. S.H.P. : 8,500 = 18·4 kts.  
Boilers : 2 Foster Wheeler

**Notes.**—Launched 29 Nov. 1941. Maritime Commission type C3-S1-B1 with single screw. Out of commission, in reserve.

## Experimental Gunnery (Guided Missile) Ship.



MISSISSIPPI (before guided missile installation; no longer carries 14-inch turret aft).

1948, U.S. Navy, Official.

See new photo in Addenda, Page 470.

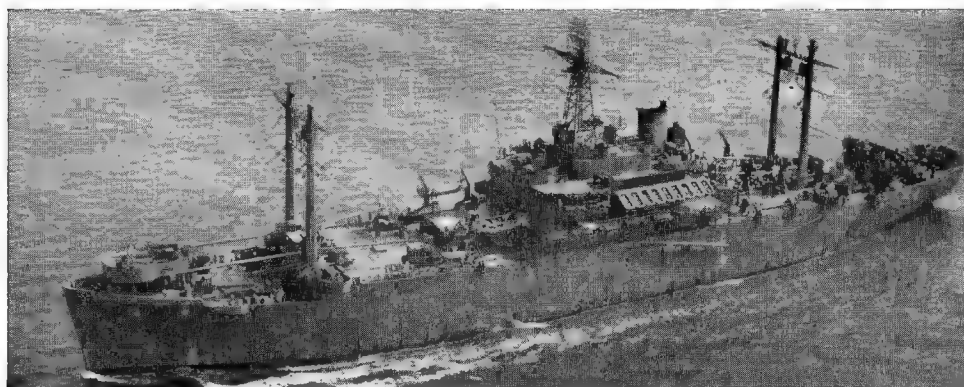
### AGC 128 MISSISSIPPI

Displacement : 29,700 tons (36,000 tons full load)  
Dimensions : 600 (w.l.) 626 (o.a.) × 106 × 29½ (mean), (max.) feet  
Guns : 2 Guided missile projectors, 2—6 inch d.p. 47 cal., 2—5 inch, 54 cal. (new type twin mount), 4—3 inch 50 cal. (new type twin mounts), Rockets. Also 6 standard 5-inch, 38 cal., for instructional purposes  
Machinery : Westinghouse geared turbines. 4 shafts. S.H.P. : 40,000 = 21.5 kts. (max. now 19 kts.)  
Boilers : 6 Bureau Express  
Oil fuel : 2,200 tons

Notes.—Built by Newport News S.B. Co. Laid down 5 Apr. 1951, Launched 25 Jan. 1917, Completed 18 Dec. 1917. Built as a battleship (BB 41) of New Mexico class, but converted into an Experimental Gunnery Ship at Norfolk Navy Yard, 1947. No longer carries 14-inch turret aft. Now fitted to carry and launch rockets and missiles. Launchers for "Terrier" guided missiles located in stern.

## Amphibious Force Flagships (AGC).

### 4 "Blue Ridge" Class.



BLUE RIDGE.

Added 1954, U.S. Navy, Official.

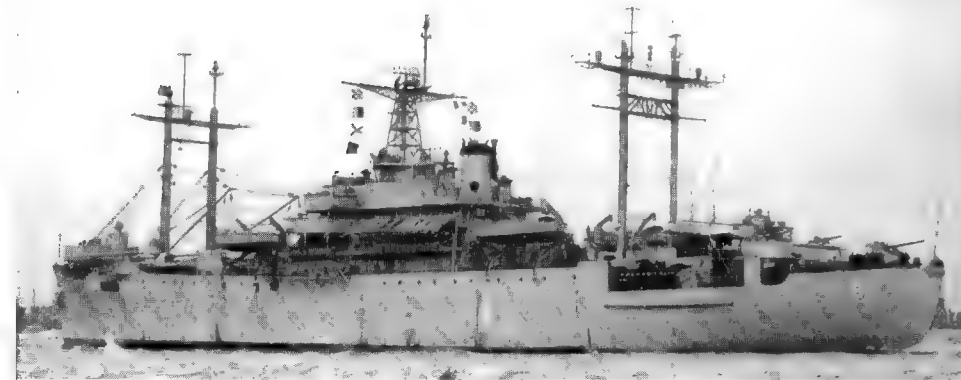
### AGC 1 APPALACHIAN (Jan. 29, 1943) 2 BLUE RIDGE (March 7, 1943)

Displacement : 7,430 tons (Navy light), 12,800 tons full load  
Dimensions : 459½ (o.a.) × 63 × 24 (max.) feet  
Machinery : Geared turbines. S.H.P. : 6,000 = 16.4 kts.

### AGC 5 CATOCTIN (ex-Mary Whitridge Jan. 23, 1943) 3 ROCKY MOUNT (March 7, 1943)

Notes.—C2-S-B1 type like AKA 53 to AKA 100 and T-AF. Launch dates above. Out of commission, in reserve.

## Amphibious Force Flagships—continued. 11 "Mount Olympus" Class.



MOUNT OLYMPUS.

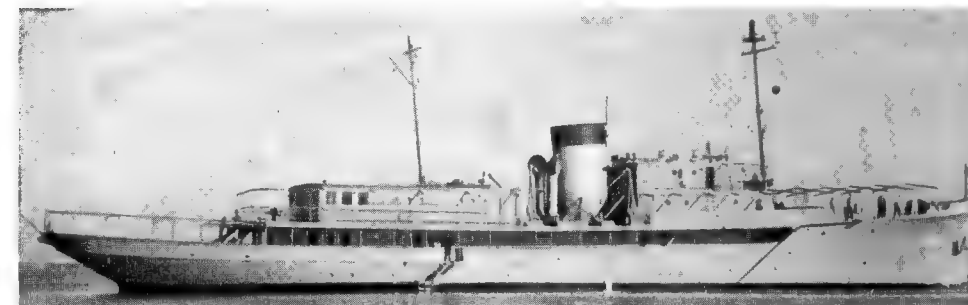
1952, Wright & Logan.

### AGC 15 ADIRONDACK 10 AUBURN (ex-Kathay) 11 ELDORADO (ex-Monsoon) 12 ESTES (ex-Morning Star) 7 MOUNT MCKINLEY (ex-Cyclone)

Displacement : 5,450 tons (Navy light), 15,295 tons full load  
Dimensions : 435 (w.l.), 459½ (o.a.) × 63 × 28½ (max.) feet  
Guns : 2—5 inch, 8—40 mm. AA.  
Machinery : Geared turbines. S.H.P. : 6,000 = 16.4 kts.  
Boilers : 2 Combustion Engineering type  
Complement : About 550

### AGC 8 MOUNT OLYMPUS (ex-Eclipse) 13 PANAMINT (ex-Northern Light) 16 POCONO 17 TACONIC 14 TETON (ex-Witch of the Wave) 9 WASATCH (ex-Fleetwing)

Notes.—C2-S-AJ1 type, but differ. Originally rated as Combined Operations Communications Headquarters Ships, these vessels are fitted as flagships for Chiefs of Combined Forces, with accommodation for Marine or Army units attached. Radar and radio equipment is exceptionally elaborate. In 1951 the Mount Olympus temporarily relieved the heavy cruiser Columbus as flagship of the Commander-in-Chief, American Forces, Eastern Atlantic and Mediterranean. After guns removed in Eldorado and helicopter landing platform installed. Twin 40-mm. installed on extended stern of Eldorado instead of 5-inch, 38 cal., as formerly. Estes, Mount Olympus and Mount McKinley also fitted with helicopter landing platform on stern. Adirondack and Taconic have single mast instead of after king-post.



WILLIAMSBURG.

1952, Ted Stone

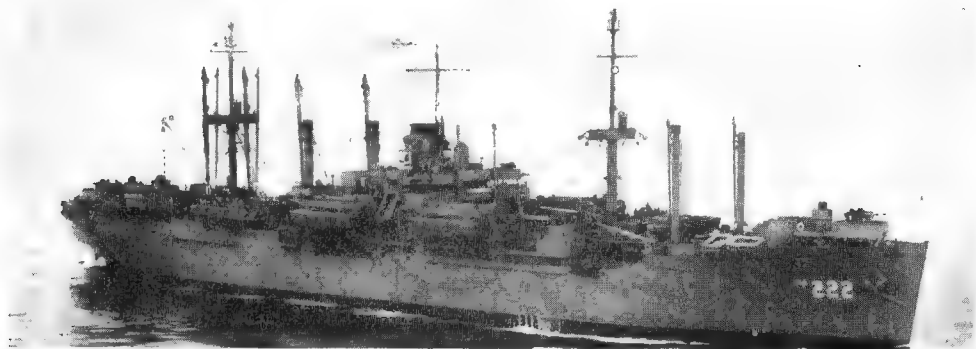
### AGC 369 WILLIAMSBURG (ex-Aras)

Displacement : 1,730 tons  
Dimensions : 224 (w.l.), 243½ (o.a.) × 36 × 16 (mean) feet  
Machinery : Winton Diesel. 2 shafts. B.H.P. : 2,200 = 16 kts.

Notes.—Launched 1931. Ex-PG 56. Yacht acquired in 1941. Refitted and redesignated AGC in 1946. Used as Presidential Yacht until end of 1952. Decommissioned.

U.S.A.—Attack Transports

57 "Arenac" Class.



PICKAWAY.

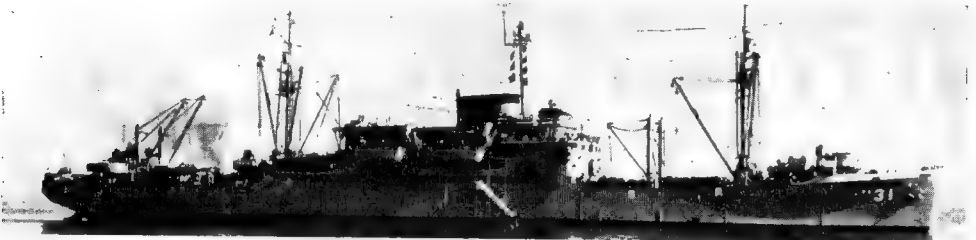
1953, U.S. Navy, Official.

APA	APA	APA	APA	APA
128 ARENAC	156 GAGE	156 MELLETTE	217 NEW KENT	229 ROCKINGHAM
132 BARNWELL	239 GLYNN	201 MENARD	218 NOBLE	230 ROCKWALL
237 BEXAR	172 GRIMES	202 MENIFEE	219 OKALOOSA	192 RUTLAND
136 BOTETOURT	176 KERSHAW	203 MERI WETHER	220 OKANOOGAN	193 SANBORN
235 BOTTINEAU	152 LATIMER	207 MIFFLIN	188 OLMSTED	194 SANDOVAL
236 BRONX	180 LAVACA	211 MISSOULA	221 ONEIDA	232 SAN SABA
140 BROOKINGS	195 LENAWEE	212 MONTROSE	222 PICKAWAY	204 SARASOTA
144 CLINTON	196 LOGAN	213 MOUNTRAIL	224 RANDALL	205 SHERBURNE
148 CROCKETT	197 LUBBOCK	214 NATRONA	226 RAWLINS	206 SIBLEY
238 DANE	198 MCCracken	215 NAVARRO	227 RENVILLE	208 TALLADEGA
160 DEUEL	199 MAGOFFIN	216 NESHABA	228 ROCKBRIDGE	209 TAZEWell
164 EDGEcombe			210 TELFAIR	

Displacement : 6,720 tons (light), 12,450 tons full load  
Dimensions : 436½ (w.l.), 455 (o.a.) × 62 × 24 (max.) feet  
Guns : 1—5 inch, 12—40 mm. AA.  
Machinery : Geared turbines. S.H.P. : 8,500 = 17·7 kts.  
Boilers : 2 Babcock & Wilcox  
Complement : 536 (war)

Notes.—VC 2-S-AP 5 "Victory" type, all launched 1944-45. All county names. Can carry 1,560 troops and 3,000 tons of war stores.

4 "Delta" Type.



MONROVIA.

1954, Lieut. Aldo Fraccaroli.

APA	APA
32 CALVERT (ex-Deloreans, May 29, 1943)	21 CRESCENT CITY (ex-Deloreans, 1940)
28 CHARLES CARROLL (ex-Deluruguay), 1941	31 MONROVIA (ex-Delargentino, 1942)

Displacement : 8,429 tons (light), 14,247 tons full load  
Dimensions : 468 (pp.), 491 (o.a.) × 65½ × 25½ (max.) feet  
Guns : 1—5 inch, 3—3 inch, 4—40 mm. AA.  
Machinery : Geared turbines. S.H.P. : 7,800 = 16 kts.  
Boilers : 2 Babcock & Wilcox

Notes.—C 3-Delta type, formerly with "Del" names. Can carry 1,200 troops. Built by Bethlehem, Sparsons Pt.

6 "Bayfield" Type.



CHILTON.

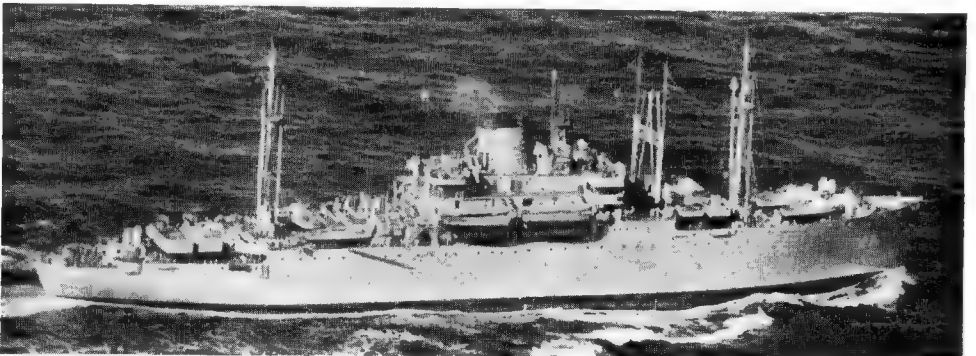
1952, Harvey Gilston, Esq.

APA	APA	APA
33 BAYFIELD (ex-Sea Bass)	37 CAVALIER (Mar. 15 1943)	44 FREMONT (ex-Sea Corsair, Mar. 31 1943)
36 CAMBRIA (ex-Sea Swallow)	38 CHILTON (ex-Sea Needle, Dec. 24 1942)	45 HENRICO (ex-Sea Darter, Mar. 31 1943)

Displacement : 8,100 tons (light), 16,100 tons full load  
Dimensions : 465 (w.l.), 492 (o.a.) × 69½ × 26½ (max.) feet  
Guns : 2—5 inch, 4—40 mm. AA.  
Machinery : Geared turbines. S.H.P. : 8,500 = 18·4 kts.  
Boilers : 2 Combustion Engineering type

Notes.—C3-S-A2 type, formerly with "Sea" names; but subsequently given county names by the United States Navy.

3 "American" Type.



GEORGE CLYMER.

1953, U.S. Navy, Official.

APA	APA
25 ARTHUR MIDDLETON (ex-African Comet, American Banker)	27 GEORGE CLYMER (ex-African Planet, American Farmer)
	26 SAMUEL CHASE (ex-African Meteor, American Shipper)

Displacement : 10,812 tons (Navy light), 18,000 tons full load  
Dimensions : 465 (w.l.) 489 (o.a.) × 69½ × 27½ feet  
Guns : 4—3 inch, 6—40 mm. AA.  
Machinery : Geared turbines. S.H.P. : 8,500 = 18·4 kts.  
Complement : 512

Notes.—C3-P type. Can carry 27 LCT and 1,400 troops. Vary in detail. Fitted as flagships. Launched 1941 (Middleton 28 June).

4 "President" Type.

APA	APA
19 PRESIDENT ADAMS (31 Jan. 1941)	18 PRESIDENT JACKSON (7 June 1940)
20 PRESIDENT HAYES (4 Oct. 1940)	30 THOMAS JEFFERSON (ex-President Garfield), (20 Nov. 1940)

Displacement : 10,210 tons (Navy light), 16,000 tons full load  
Dimensions : 491½ (o.a.) × 69½ × 26½ (max.) feet  
Guns : 4—3 inch, 50 cal., 6—40 mm.  
Machinery : Geared turbines. S.H.P. : 8,500 = 18·4 kts.  
Complement : 512

Notes.—C3-AP & C type. Begun by Newport News S.B. & D.D.Co. in 1940 and first commissioned in Navy 1941. Can carry 1,500 troops. President Jackson and Thomas Jefferson assigned to Military Sea Transportation Service. Other two out of commission, in reserve.



## New Construction.

## AKA 112 (ex-Evergreen Mariner)

Displacement : 17,988 tons full load  
 Measurement : 9,200 tons gross, 13,400 tons deadweight  
 Dimensions : 528½ (pp.), 563 (o.a.) × 76 × 24½ feet  
 Machinery : Turbine, 1 shaft. S.H.P. : 19,250 = 22 kts.

Notes.—New construction, fiscal year 1954. Built by Bethlehem, San Francisco. Laid down 22 Dec. 1953, launched 16 Feb. 1954. Acquired by Navy during construction. To complete as AKA. C4-S-1B type.

## 3 "Libra" Class.



TITANIA.

1953, U.S. Navy, Official.

## AKA

12 LIBRA (ex-Jean Lykes, 1941)

14 OBERON (ex-Delfaba, March 18, 1942)

Displacement : 6,345 tons (light), 14,440 tons full load  
 Dimensions : 435 (w.l.), 459½ (o.a.) × 63 × 26½ (max.) feet  
 Guns : 1—5 inch, 8—40 mm. AA.  
 Machinery : Geared turbines. S.H.P. : 6,000 = 16.5 kts.  
 Boilers : 2 Foster-Wheeler  
 Complement : 250

Notes.—C2-F Cargo (S) type. Launch dates above. Can carry 5,400 tons of cargo and 2,000 tons of war equipment. Oberon MSTs.

## 2 "Bellatrix" Type.



BELLATRIX.

1953, U.S. Navy, Official.

## AKA

3 BELLATRIX (ex-Raven)

Displacement : 6,194 tons (light), 10,432 tons (full load). Maritime Commission deadweight, 8656 tons  
 Dimensions : 459 (o.a.) × 63 × 25½ (max.) feet  
 Machinery : Diesel, 1 shaft. B.H.P. : 6,000 = 15.5 kts.

Notes.—C2-T type. Laid down and commissioned in Navy 1940. Reactivated for Navy 1951 from M.A. Reserve Fleet.

## AKA

13 TITANIA (ex-Harry Culbreath, Feb. 28, 1942)

## 25 "Andromeda" Class.



ARNEB

1951, Abrahams.

## AKA

53 ACHERNAR (Dec. 22, 1943)  
 54 ALGOL (ex-James Baines)  
 55 ALSHAIN (Jan. 26, 1944)  
 15 ANDROMEDA (Dec. 22, 1942)  
 56 ARNEB (ex-Mischief)  
 57 CAPRICORNUS (ex-Spitfire)  
 58 CHARA (March 15, 1944)  
 59 DIPHDA (May 11, 1944)

## AKA

60 LEO (June 29, 1944)  
 95 MARQUETTE (April 29, 1945)  
 96 MATTHEWS (Dec. 22, 1944)  
 97 MERRICK (Jan. 28, 1945)  
 98 MONTAGUE (Feb. 11, 1945)  
 61 MULTIPHEN (Aug. 26, 1944)  
 100 OGLETHORPE (April 15, 1945)  
 99 ROLETTE (Mar. 11, 1945)

## AKA

19 THUBAN (April 26, 1943)  
 88 UVALDE (May 20, 1944)  
 20 VIRGO (June 4, 1943)  
 89 WARRICK (May 29, 1944)  
 90 WHITESIDE (June 12, 1944)  
 91 WHITLEY (June 22, 1944)  
 94 WINSTON (Nov. 30, 1944)  
 92 WYANDOT (June 28, 1944)  
 93 YANCEY (July 8, 1944)

Displacement : 7,430 tons (light), 12,800 tons full load  
 Dimensions : 435 (w.l.), 459½ (o.a.) × 63 × 24 (max.) feet  
 Guns : 1—5 inch, 8—40 mm. AA.  
 Machinery : Geared turbines. S.H.P. : 6,000 = 16.4 kts.  
 Boilers : 2 Foster-Wheeler  
 Complement : 247

Notes.—C2-S-B1 type. Launch dates above. Can carry over 5,200 tons of cargo and 2,200 tons of tanks. Arneb completed refit for Arctic service Mar. 15 1949. Other vessels are also to be "winterised." Matthews, Merrick and Rolette reacquired from the Maritime Administration Reserve Fleet by the Navy, 1951, and reactivated. Leo assigned to Military Sea Transportation Service.

## 6 "Rankin" Type.



SKAGIT.

1954, Ted Stone.

## AKA

103 RANKIN

104 SEMINOLE

105 SKAGIT

106 UNION

107 VERMILION

108 WASHBURN

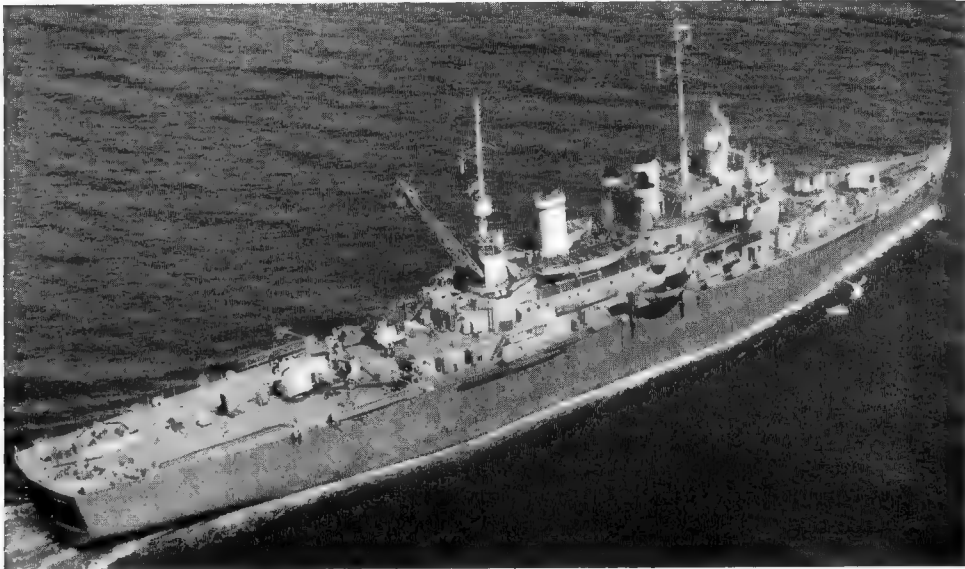
Displacement : 6,456 tons (Navy Light), 14,160 tons (full load)  
 Dimensions : 459½ (o.a.) × 63 × 26½ (max.) feet  
 Guns : 1—5 inch, 38 cal., 8—40 mm. AA., 10—20 mm. AA.  
 Machinery : Geared turbines, 1 shaft. S.H.P. : 6,000 = 16.5 kts.  
 Complement : 247

Notes.—C2-S-AJ3 type. Laid down 1944 and first commissioned in the Navy 1945. Combat load 4,500 tons. Rankin was reactivated 1951



U.S.A.—Large Minelayer, Landing Ships

Large (Cruiser) Minelayer (CM).



CM 5 TERROR. 1950, U.S. Navy, Official

CM  
5 TERROR

Displacement : 5,875 tons (8,650 tons full load)  
Dimensions : 453½ (o.a.) × 60½ × 20 (max.) feet  
Guns : 4—5 inch, 38 cal., 24—40 mm. (quadruple mounts)  
Mines : 800  
Machinery : Geared turbines. 2 shafts. S.H.P. : 11,000 = 20 kts.  
Complement : 400 (war)

Notes.—Built under 1938 Programme. Built by Philadelphia Navy Yard, Launched 6 June 1941, Completed 1942. Mine ports in stern Cruiser type with high freeboard. Out of commission, in reserve.

Vehicle Landing Ships (LSV).

2 Converted Large Minelayer Type.

LSV  
1 CATSKILL (ex-CM 6, May 19, 1942)

Displacement : 5,875 tons (9,040 tons full load)  
Dimensions : 440 (w.l.), 455½ (o.a.) × 60½ × 20 feet  
Guns : 2—5 inch, 38 cal., 8—40 mm. AA.  
Machinery : Geared turbines. 2 shafts. S.H.P. : 11,000 = 20-3 kts.  
Boilers : 4 Combinations Engineering type  
Complement : 400

Notes.—Both built by Willamette Iron & Steel Corp., Portland, Oregon, under 1940 Programme. Launch dates above. Designed as large Minelayers (see photo above) but subsequently converted into Landing Ships (Vehicle). Out of commission, in reserve.

LSV  
2 OZARK (ex-CM 7, June 15, 1942)

3 Converted Netlayer Type.

LSV  
5 MONITOR (ex-AN 1, Jan. 29, 1943)

LSV  
3 OSAGE (ex-AN 3, June 30, 1943)

LSV  
4 SAUGUS (ex-AN 4, Sept. 4, 1943)

Displacement : 5,625 tons (9,040 tons full load)  
Dimensions : 440 (w.l.), 451½ (o.a.) × 60½ × 20 feet  
Guns : 2 or 3—5 inch, 38 cal., 8—40 mm. AA.  
Machinery : Geared turbines. 2 shafts. S.H.P. : 11,000 = 20-3 kts.  
Boilers : 4 Combustion Engineering type  
Complement : 564

Notes.—All built by Ingall's S.B. Corp., Pascagoula, Miss. Launch dates above. Designed as Netlayers and Net Carriers (see photo page 443), but converted into Landing Ships (Vehicle). Carry 40 LVTs and 800 troops. Out of commission, in reserve.

Dock Landing Ships (LSD).

8 New Construction.

LSD 28 THOMASTON  
29 PLYMOUTH ROCK

LSD 30 FORT SNELLING  
31 POINT DEFIANCE

LSD 32  
33

Displacement : 6,880 tons standard (11,270 tons full load) LSD 32, 33 12,150 tons  
Dimensions : 510 (o.a.) × 84 × 19 (max.) feet  
Machinery : Turbine. 2 shafts

Notes.—Same general design as earlier types, but larger and faster. Built by Ingall's Shipbuilding Corporation, Pascouia, Mississippi Fitted with helicopter landing platforms, 2-50 ton cranes. 21 LCM (6) can be carried. Complement 766. 2 new LSD requested in 1955 fiscal appropriations.



RUSHMORE.  
LSD 16 CABILDO (Dec. 28, 1944)  
13 CASA GRANDE (ex-Spear, ex-Portway, April 11, 1944)  
17 CATAMOUNT (Jan. 27, 1945)  
18 COLONIAL (Feb. 28, 1945)  
19 COMSTOCK (April 28, 1945)  
20 DONNER (April 6, 1945)  
21 FORT MANDAN (1945)

1952, Harvey Gilston, Esq.  
LSD 22 FORT MARION (May 22, 1945)  
14 RUSHMORE (ex-Sword, ex-Swashway, May 10, 1944)  
25 SAN MARCOS (Jan. 10, 1945)  
15 SHADWELL (ex-Tomahawk, ex-Waterway, May 24, 1944)  
26 TORTUGA (Jan. 21, 1945)  
27 WHETSTONE (1945)

Displacement 4,790 tons (8,730 tons limit)  
Dimensions : 457½ (o.a.) × 72½ × 18 (max.) feet  
Guns : 1—5 inch, 38 cal., 12—40 mm. AA.  
Machinery : Geared turbines. 2 shafts. S.H.P. : 7,000 = 15-4 kts.  
Complement : 240

Notes.—Built by Newport News, Gulf S.B. Corp. and Navy Yards. Same type as "Ashland" class, below, but differently propelled Can carry 3 LSUs or 18 LCMs.



WHITE MARSH.  
LSD 1 ASHLAND (Dec. 21, 1942)  
2 BELLE GROVE (Feb. 17, 1942)  
3 CARTER HALL (March 4, 1943)  
4 EPPING FOREST (April 2, 1943)

1952, A. & J. Pavia.  
LSD 5 GUNSTON HALL (May 1, 1943)  
6 LINDENWALD (June 11, 1943)  
7 OAK HILL (June 25, 1943)  
8 WHITE MARSH (July 19, 1943)

Displacement : 4,790 tons standard (8,730 tons limit) LSD5, 6, 5,380 and 9,200 tons  
Dimensions : 454 (w.l.), 457½ (o.a.) × 72 × 18 feet  
Guns : 1—5 inch, 12—40 mm. AA., 16—20 mm. AA.  
Machinery : Skinner Unaflo engines. 2 shafts. I.H.P. : 7,400 = 15-6 kts.  
Boilers : 2, of 2-drum type

Notes.—All built by Moore Dry Dock Co. Designed to serve as parent ships to landing craft and coastal craft. Gunston Hall and Lindenwald adapted for Arctic service 1949. All carry 18 flat nosed LCMs (Landing Craft Medium) or 3 LCUs in their well-decks running three-quarters of their length. In each LCM a smaller LCVP (Landing Craft, Vehicle-Personnel) may be carried. Ashland and others fitted with helicopter landing platform over well deck.

## Tank Landing Ships (LST).

**General Note.**—Announced by Chief of Naval Operations 26 May 1954 that Landing Ships, Tank are to be named in the near future. At present they carry only numbers.

### 9 New Type.

**Notes.**—Under the 1954 fiscal year new construction programme a \$14,000,000 contract has awarded for a new type LST. Cost includes plans and development work. 8 new LSTs requested in 1955 fiscal appropriations.

### 17 New Construction.



LST 1158.

1954, Ted Stone.

#### LST 1156-1170 SERIES

Displacement :	3,200 tons <i>light</i> (5,786 tons <i>max.</i> ) trials
Dimensions :	384 (o.a.) × 55 × 12½ (mean draught under <i>max.</i> load)
Guns :	3-inch, 50 cal. and 20 mm. AA.
Machinery :	Four Diesel engines. 2 shafts. Controlled pitch propellers. B.H.P. : 6,000

**Note.**—Design is modification of that of two experimental ships constructed during Second World War. LST 1156 launched 9 Aug. 1952, 1158 11 April 1953, 1163 17 Mar. 1953, 1156-1160 built by Bath Iron Works, 1166-1170 by Christy Corporation, 1161-1165 by Ingalls' Shipbuilding Corpn.

#### LST 1153

Displacement :	2,324 tons (6,000 tons <i>full load</i> )
Dimensions :	368 (w.l.), 382 (o.a.) × 54 × 14½ feet
Guns :	2—5 inch, 38 cal., 4—40 mm. AA.
Machinery :	Geared turbines. 2 shafts. S.H.P. : 6,000 = 14 kts.
Complement :	82

**Notes.**—Built by Boston Navy Yard. 1153 launched 27 Apr. 1947, completed 3 Sep. 1947 ; 1154 launched 19 July 1946, completed June 9 1949. This type can carry 4 small landing craft, and has increased troop accommodation, greater tank, vehicle and cargo capacity and improved arrangements for discharge, compared with "LST 1-1152" class.

## Inshore Fire Support Ship.

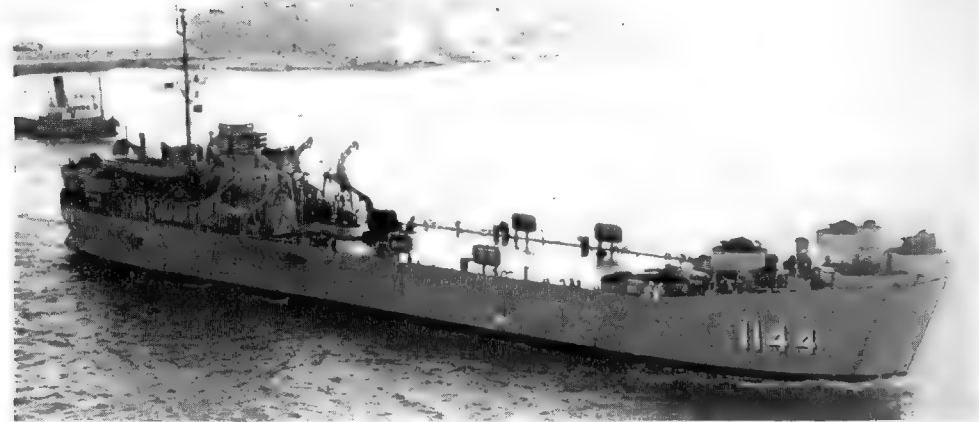
### IFS

#### 1 CARRONADE

Displacement :	1,500 tons <i>light</i>
Dimensions :	245 × 38½ × — feet
Machinery :	Diesels: 2 shafts, geared drive, twin screws with variable pitch.
Complement :	162

**Notes.**—Designed to support troops in amphibious landings. Built by Puget Sound Bridge & Dredging Co. Main armament comprises rapid fire rocket launchers. Keel laid 19 Nov. 1952. Launched 26 May 1953.

## 150 "LST 1-1152" Classes.



LST 1144.  
LST 511-1152 SERIES

1951 Photo.

Displacement :	1,653 tons <i>standard</i> (4,080 tons <i>full load</i> )
Dimensions :	316 (w.l.), 328 (o.a.) × 50 × 14 (max.) feet
Guns :	7—40 mm. AA., 2—20 mm. AA.
Machinery :	Diesel. 2 shafts. B.H.P. : 1,700 = 11 kts.
Cargo capacity :	2,100 tons
Complement :	211

**Notes.**—LST 526 was the only U.S. ship of her type to serve as an aircraft carrier in the Second World War. Fitted with a plywood flight deck she carried 10 Piper Cubs and their Army Pilots, and operated off the west coast of France in 1945. (Some British LSTs flew off artillery observation aircraft from their upper decks). LSTH 731, now reclassified as LST 731, in Atlantic Reserve Fleet. LST 735 and 739 serve as mine squadron flagships and carry helicopters.



LST 32.  
LST 1-510 SERIES

1954, A. & J. Pavia.

Displacement :	1,625 tons (4,050 tons <i>full load</i> )
Dimensions :	328 (o.a.) × 50 × 14½ (max.) feet
Machinery :	Diesel. 2 shafts. B.H.P. : 1,700 = 10.8 kts.

**Notes.**—Are ocean tank carriers with bow doors. In the Second World War LST 32 was fitted with railway lines on the tank deck to enable her to transport trucks from Sicily to the mainland. LST 32 was converted to Air Force, Atlantic, Flagship in 1953 (see photo). Fitted for advanced base air support, carries 2 LCM on deck. About 90 LST are active (all classes.) 38 LSTs assigned to MSTs and designated USNS are Japanese manned.

## U.S.A.—Landing Craft

### Medium Landing Ships (LSM).



LSM 458.

LSM 1-558 SERIES

1952, U.S. Navy, Official.

Displacement : 743 tons *beaching*, (1,095 tons *full load*)  
Dimensions :  $196\frac{1}{2}$  (w.l.),  $203\frac{1}{2}$  (o.a.)  $\times$   $34\frac{1}{2}$   $\times$   $8\frac{1}{2}$  feet  
Guns : 2—40 mm. AA.  
Tanks : 5 Medium  
Machinery : Diesel. 2 shafts. B.H.P. : 2,800 = 12 kts.  
Complement : 59

Notes.—157 in service or reserve. Some have been fitted with Kirsten cycloidal propellers, enabling ships to turn 360 degrees and remain in same position. LSM 445 is employed as Experimental Radar Training Ship for Naval Reserve with lattice tripods fore and aft in addition to pole mast amidships LSM 446 similar, LSM 335 and LSM 476 assigned to Military Sea Transportation Service 1 July 1951; classed as USNS (Navy-owned, non commissioned, in service).

### Medium (Rocket) Landing Ships (LSMR).



LSMR 527.

LSMR 401-412, 501-536

1953, U.S. Navy, Official.

Displacement : 520 tons (961 to 1,084 tons *full load*)  
Dimensions :  $203\frac{1}{2}$  (o.a.)  $\times$   $34\frac{1}{2}$   $\times$   $8\frac{1}{2}$  (max.) feet  
Guns : 1—5 inch, 4—4.2 inch mortars, 2—40 mm. AA., 10 rocket projectors  
Machinery : Diesel. 2 shafts. B.H.P. : 2,800 = 13 kts.  
Complement : 120

Notes.—48 in service or reserve. Modified LSMs. The ten automatic rocket launchers are continuously fed, each firing thirty spin-stabilised 5-inch rockets per minute, a barrage of 300 per clip. In war time conning tower was sited as in top photo but conning tower is now situated on star amidships and the 5-inch gun directly before it. Some retain the high LSM bow while others have the lower-ship bow.

### Support Landing Ships (LSSL).

#### LSSL 1-130<sup>2</sup> SERIES

Displacement : 227 tons (383 tons *full load*)  
Dimensions :  $158\frac{1}{2}$  (o.a.)  $\times$   $23\frac{1}{2}$   $\times$   $5\frac{1}{2}$  (max.) feet  
Guns : 1—3 inch, 50 cal., 4—40 mm. AA.  
Machinery : Diesel. 2 shafts. B.H.P. : 1,600 = 14.5 kts.  
Complement : 73

Notes.—Formerly LCS(L) Mark III. Only two in the Navy List in 1954, LSSL 35 and 65. Six transferred to Italian Navy in 1951 and 50 to Japanese Coastal Security Force in 1953, 4 to Korea, 3 to Nationalist China, 2 to France in 1954.

### Infantry Landing Ships (LSIL).

#### LSIL 1-1098<sup>2</sup> SERIES

Displacement : 230 tons (387 tons *full load*)  
Dimensions :  $159$   $\times$   $23\frac{1}{2}$   $\times$   $5\frac{1}{2}$  feet  
Guns : 4 or 5—20 mm. AA.  
Machinery : Diesel. 2 shafts. B.H.P. : 1,320 = 14 kts.  
Complement : 29 to 78, according to employment

Notes.—Later LSILs, 693, etc., have small bow doors as in LSTs. LSIM 638, redesignated LSIL, 722 LSFF (Flotilla Flagships) survive. 20 ships of the LSIL type were converted into coastal minesweepers (underwater locator) now known as mine hunters, in 1952, leaving 41 LSILs remaining in the list of naval vessels. LSIL 978 was stricken 1952.

### Utility Landing Craft (LCU).

#### 2 New Type Projected.

Note.—Two new utility landing craft of a new design are planned under the 1955 construction programme. Development contract negotiated with the Staten Island yard of the Bethlehem Steel Company.

#### 38 New Construction.

#### LCU 1466-1503 SERIES

Displacement : 180 tons *light* (360 tons *full load*)  
Dimensions :  $115\frac{1}{2}$  (w.l.), 119 (o.a.)  $\times$   $34$   $\times$   $6$  feet  
Guns : 2—20 mm.  
Machinery : 3 Diesels 3 shafts. S.H.P. : 675

Notes.—Announced contracts awarded 2 Nov. 1951. Basically the same as Second World War LCTs. Slightly longer and wider. Chief mission will still be that of putting tanks, and their crews on to beaches. Designation was changed from LCT to LSU because of their many additional uses, and subsequently (1952) to LCU. Built to be transferred on LSTs in three sections, each of which is watertight and can be launched from LST and floated independently. At least three transferred to other countries under MDAP

#### LCU 501-1465 SERIES (ex-LSU, ex-LCT (6))

Displacement : 143 tons (309 tons *full load*)  
Dimensions :  $120\frac{1}{2}$  (o.a.)  $\times$   $32\frac{1}{2}$   $\times$   $4$  (max.) feet  
Guns : 2—20 mm.  
Machinery : Diesel. 3 shafts. B.H.P. : 675 = 10 kts.

Notes.—160 of these LCUs in service or reserve. Conversion of Nos. 1273, 1330, 1363, 1452, 1463, 1374 for Arctic service completed March 1949. Formerly rated as Landing Ships Tank (Small). Re-designated LSUs late 1949. Reclassified LCUs 15 April 1952. Can carry 4 tanks or 150 tons of cargo. LCU 1362 assigned to MSTs. LCU 1460 lost at sea 1952.

### Small Landing Craft.

#### 1,000 New Construction.

#### LCVP SERIES

Note.—The construction of 1,000 new small landing craft of LCVP type, totalling 8,000 tons has been planned under the 1955 new building programme.

## Transports



BARRETT.

1953, U.S. Navy, Official.

**T-AP 196 BARRETT** (ex-President Jackson)      **T-AP 197 GEIGER** (ex-President Adams)      **T-AP 198 UPSHUR** (ex-President Hayes)

Displacement: 17,600 tons standard, 19,600 tons (full load)  
Measurement: 12,660 tons (gross), 10,600 tons deadweight  
Dimensions: 500 (pp.), 533 (o.a.) × 73 × 27 feet  
Machinery: Geared turbines. 1 shaft. S.H.P.: 13,750=19 to 20 kts. (cruising, see notes)

**General Notes.**—Maritime Administration type P2-SI-DNI. Originally laid down as passenger ships for the American President Lines but taken over by the Navy to be completed as troop transports, and have all been assigned to Military Sea Transportation Service as U.S. Naval Ships (non-commissioned naval vessels). Troop carrying capacity of 1,500 plus 396 cabin berths for officers and dependents. Troop life can be increased by at least 1,000 men if necessary by converting recreation areas into berthing spaces. All spaces, compartments and holds are air-conditioned except the engine room and bridge.

**Engineering Notes.**—On sea trials Barrett attained speed of 21.5 knots at full power, 1.5 knots more than expected by engineers on the basis of shaft horse power developed.

Name.	Builders	Laid down	Launched	Completed
Barrett	New York Ship-building Corp., Camden, N.J.	1 June, 1949	27 June, 1950	15 Dec., 1951
Geiger		1 Aug., 1949	9 Oct., 1950	13 Sep. 1952
Upshur		30 Sept., 1949	19 Jan., 1951	1953



GENERAL A. E. ANDERSON.

Photo added 1951.

**T-AP 111 GEN. A. E. ANDERSON** (May 2, 1943) —  
**115 GEN. G. M. RANDALL** (Jan. 30, 1944).  
**113 GEN. H. W. BUTNER** (Sept. 10, 1943)  
**176 GEN. J. C. BRECKINRIDGE** (Mar. 18, 1944)  
**110 GEN. JOHN POPE** (USNS) (Mar. 21, 1945)

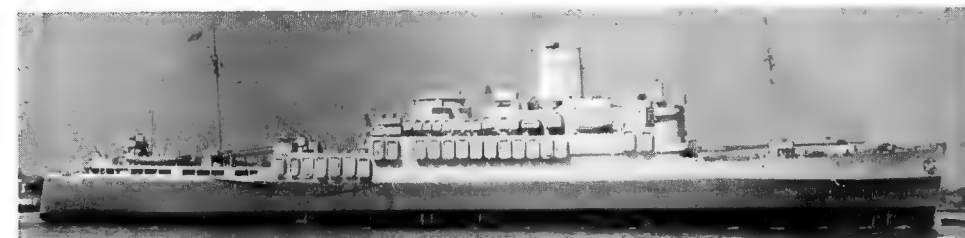
**T-AP 116 GEN. M. C. MEIGS** (USNS) Mar. 12, 1944  
**112 GEN. W. A. MANN** (July 18, 1943)  
**114 GEN. WILLIAM MITCHELL** (Oct. 31, 1943)  
**119 GEN. WILLIAM WEIGEL** (USNS) Sep. 3 1944  
**117 GEN. W. H. GORDON** (USNS) May 7 1944

Displacement: 11,828 tons (20,175 tons full load)  
Dimensions: 573 (w.l.), 622½ (o.a.) × 75½ × 25½ (max. feet)  
Guns: 4—5 inch, 8—40 mm. AA., 20 mm.  
Machinery: De Laval geared turbines. 2 shafts. S.H.P.: 17,000=20.6 kts.  
Boilers: 4 Foster-Wheeler, 465 lb. working pressure  
Troops: 5,500

**Notes.**—All built by Federal S.B. & D.D. Co. at Kearny. AP 110, 116, 119 assigned to Military Sea Transportation Service 1 July 1951 others to MSTs in 1950. AP 117 reacquired by Navy from Maritime Administrations 1951. AP 110, 116, 117 and 119 designated USNS and not armed, remainder USS.

**Notes.**—On Oct. 1, 1949 the U.S. Navy's Military Sea Transportation Service took over Naval and Army Transport Services.

**General Notes.**—Non-commissioned ships of the Military Sea Transportation Service (U.S. Naval Ships), Transports, Cargo Ships and Tankers, are identified by a blue and gold band on their funnels, with names painted on each bow and stern prefixed with the letters U.S.N.S. In other respects they are painted as other U.S. Navy ships. "T" prefixed to designation indicates assignment to MSTs.



LE JEUNE

U.S. Navy, Official.

**LE JEUNE** (ex-Windhuk)

Launched: 1936

Displacement: 16,662 tons (19,200 tons full load)  
Dimensions: 548 (pp.), 572½ (o.a.) × 72½ × 26½ feet  
Guns: 1—5 inch, 4—3 inch, 8—40 mm. AA.  
Machinery: Geared turbines. 2 shafts. S.H.P.: 13,500=17.5 kts.  
Boilers: 3 Babcock & Wilcox  
Troops: 4,660

**Notes.**—Formerly German liner, No. AP<sub>74</sub>. Out of commission, in reserve.



WAKEFIELD.

Added 1953, U.S. Navy, Official.

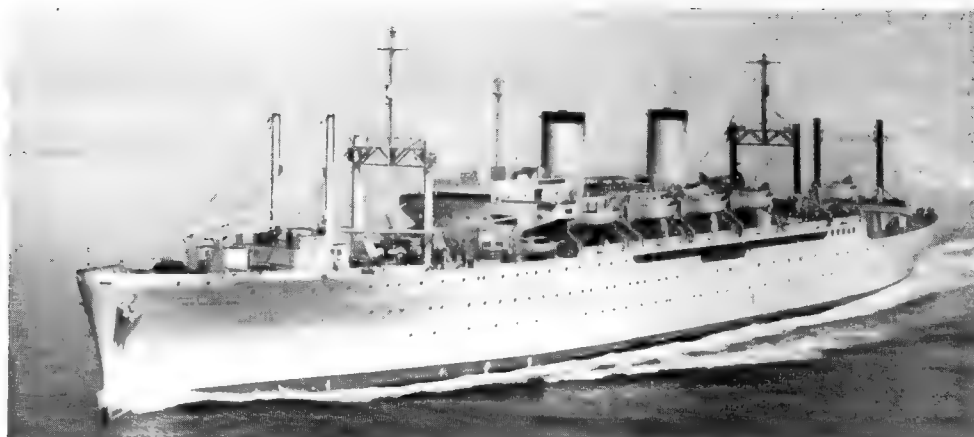
**WAKEFIELD** (ex-Manhattan)

Launched: 1932

Displacement: 22,800 tons (33,500 tons full load)  
Dimensions: 668 (pp.), 705 (o.a.) × 86 × 30 (max.) feet  
Guns: 4—5 inch  
Machinery: Geared turbines. 2 shafts. S.H.P.: 30,000=22 kts.  
Troops: 7,500

**Notes.**—No. AP 21. Ex-liner. In Atlantic Reserve Fleet, New York Group, at Bayonne, New Jersey. Of the two Pacific liners the U.S. Navy was authorized to take over and convert into transports the Monterey is in Maritime Administration Reserve Fleet and Mariposa was sold to foreign interests.

M.S.T.S. Transports.



GENERAL MAURICE ROSE.

1952, Skyfotos.

8 M.C. Type P 2-SE2-R1

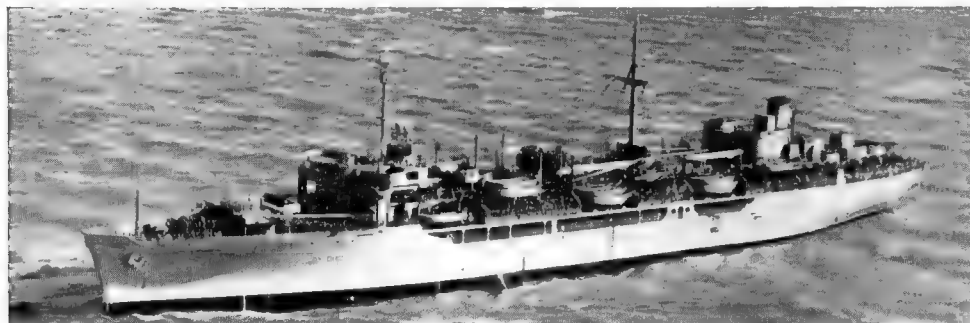
T-AP

120 GEN. DANIEL I. SULTAN (ex-Admiral W. S. Benson)  
121 GEN. HUGH J. GAFFEY (ex-Admiral W. L. Capps)  
122 GEN. ALEXANDER M. PATCH (ex-Admiral R. E. Coontz)  
123 GEN. SIMON B. BUCKNER (ex-Admiral E. W. Eberle)

T-AP

124 GEN. EDWIN D. PATRICK (ex-Admiral C. F. Hughes)  
125 GEN. NELSON M. WALKER (ex-Admiral H. T. Mayo)  
126 GEN. MAURICE ROSE (ex-Admiral Hugh Rodman)  
127 GEN. WILLIAM O. DARBY (ex-Admiral W. S. Sims)

Displacement : 9,676 tons (20,120 tons full load)  
Dimensions : 609 (o.a.) × 75½ × 26½ (max.) feet  
Machinery : Turbo-electric, 2 shafts. S.H.P. : 18,000 = 19 kts.



GENERAL M. B. STEWART.

1952, Skyfotos.

24 Type C4-S-A1

T-AP

134 GENERAL R. L. HOWZE  
135 GENERAL W. M. BLACK  
137 GENERAL S. D. STURGIS  
138 GENERAL C. G. MORTON  
139 GENERAL R. E. CALLAN  
140 GENERAL M. B. STEWART  
141 GENERAL A. W. GREELY  
142 GENERAL C. H. MUIR

T-AP

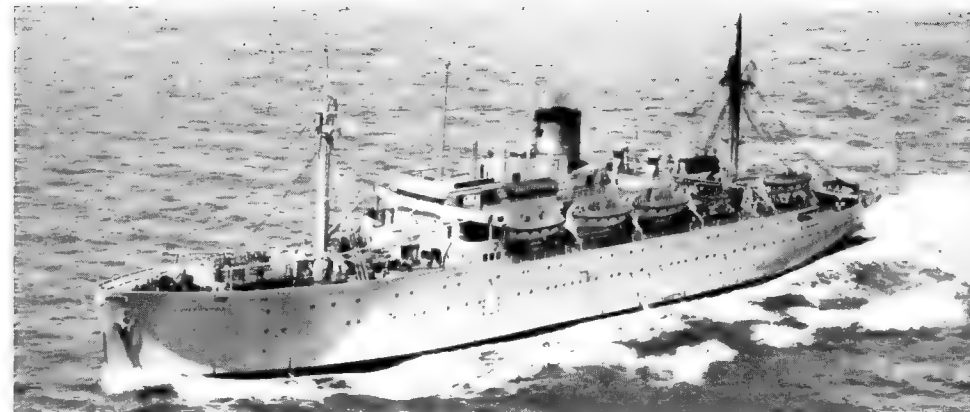
143 GENERAL H. B. FREEMAN  
144 GENERAL H. F. HODGES  
145 GENERAL HARRY TAYLOR  
146 GENERAL W. F. HASE  
147 GENERAL E. T. COLLINS  
148 GENERAL M. L. HERSEY  
149 GENERAL J. H. McRAE  
150 GENERAL M. M. PATRICK

T-AP

151 GENERAL W. C. LANGFITT  
153 GENERAL R. M. BLATCHFORD  
154 GENERAL LEROY ELTINGE  
155 GENERAL A. W. BREWSTER  
156 GENERAL D. E. AULTMAN  
157 GENERAL C. C. BALLOU  
158 GENERAL W. G. HAAN  
159 GENERAL STUART HEINTZELMAN

Displacement : 10,034 tons (17,250 tons full load)  
Dimensions : 522½ (o.a.) × 71½ × 26½ (max.) feet  
Machinery : Turbine. S.H.P. : 9,000 = 17 kts.

Notes.—Carry 1,500 to 3,000 troops. T-AP 146, 148, 157, 159 laid up in Navy's Reserve Fleets 1954.



GEORGE W. GOETHALS.

1952, Skyfotos.

4 Type C3-IN-P & C

T-AP

180 DAVID C. SHANKS  
181 FRED C. AINSWORTH

Displacement :  
Dimensions :  
Machinery :

T-AP

182 GEORGE W. GOETHALS  
183 HENRY GIBBINS  
9,000 tons (full load)  
492 (o.a.) × 69½ × 26½ (max.) feet  
Turbine. S.H.P. : 8,500 = 16.5 kts.

2 Type C3-S1-A3

T-AP

178 FREDERICK FUNSTON

Displacement :  
Dimensions :  
Machinery :

T-AP

179 JAMES O'HARA  
10,967 tons (16,150 tons full load)  
492 (o.a.) × 69½ × 26½ (max.) feet  
Turbine. S.H.P. : 8,500 = 18.6 kts.



PRIVATE WILLIAM H. THOMAS.

1952, Skyfotos.

3 Type C2-S1-A1

T-AP

184 PRIVATE ELDEN H. JOHNSON (ex-Pinkney)

Displacement :  
Dimensions :  
Machinery :

T-AP

185 PRIVATE WILLIAM H. THOMAS (ex-Rixey)  
186 SERGEANT CHARLES E. MOWER (ex-Tryon)

7,791 tons (10,885 tons full load)  
450 (o.a.) × 62 × 23½ (max.) feet  
Turbine : S.H.P. : 8,500 = 18.2 kts.

Notes.—Carry 700 troops. T-AP 186 laid up in Navy Reserve Fleet, 1954.

7Type C4-S-A5

T-AP

193 MARINE ADDER  
194 MARINE LYNX

Measurement :  
Dimensions :  
Machinery :

T-AP

195 MARINE PHOENIX  
199 MARINE CARP

12,420 tons gross (carry 3,485 troops)  
523 (o.a.) × 72 × 26  
Geared turbines. S.H.P. : 9,000 = 17 kts

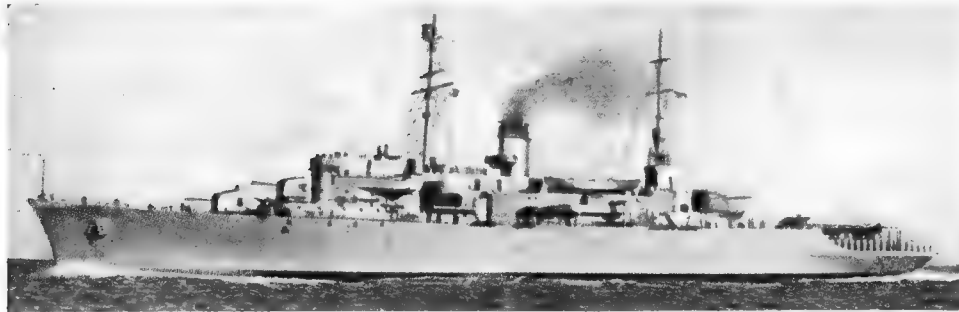
T-AP

202 MARINE SERPENT



## Net Carrier, Hospital Ships, Surveying Ships—U.S.A.

### Net Carrier (Ocean-going)



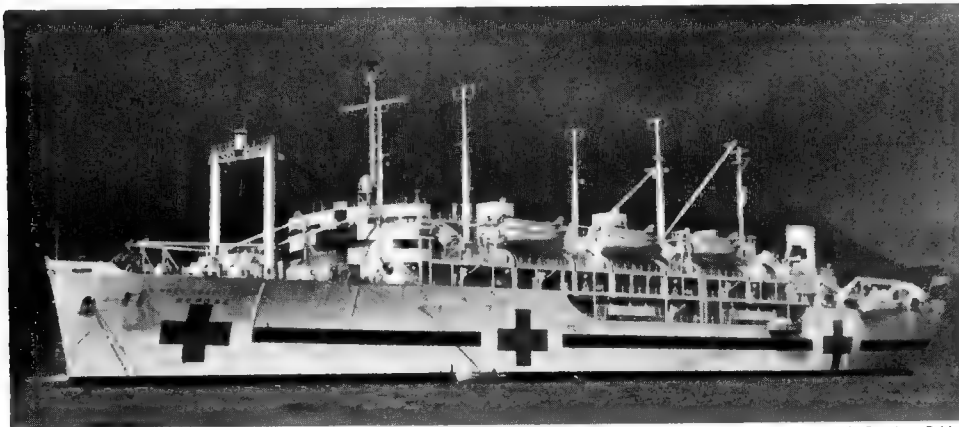
**GALILEA** (ex-Montauk)

1950, courtesy Ingalls Shipbuilding Corp

Launched : 14 Mar., 1943  
 Displacement : 5,100 tons (8,000 tons full load)  
 Dimensions : 440 (w.l.), 451½ (o.a.) × 60½ × 20 (max.) feet  
 Guns : 3—5 inch, 38 cal., 8—20 mm. AA.  
 Machinery : General Electric geared turbines. 2 shafts. S.H.P.: 11,000 = 20 kts.  
 Boilers : 4 Combustion Engineering type

Notes.—AKN 6 (ex-LSV 6, ex-AP 161). Specially converted by Ingalls Shipbuilding Corporation, Pascagoula, as a net layer and net cargo ship. Out of commission, in reserve.

### Hospital Ships.



REPOSE.

1950, Sub.-Lt. A. Sugden, R.N.

**CONSOLATION** (ex-Marine Walrus, Aug. 1, 1944)  
**HAVEN** (ex-Marine Hawk, June 24, 1944)  
**REPOSE** (ex-Marine Beaver, Aug. 8, 1944)

Displacement : 11,141 tons (15,400 tons full load)  
 Dimensions : 496 (w.l.), 520 (o.a.) × 71½ × 24 (max.) feet  
 Machinery : General Electric geared turbines. S.H.P. : 9,000 = 18.3 kts.  
 Boilers : 2 Babcock & Wilcox  
 Complement : 568-574

**SANCTUARY** (ex-Marine Owl, Aug. 15, 1944)  
**TRANQUILLITY** (ex-Marine Dolphin, July 25, 1944)

Notes.—All built by the Sun S.B. & D.D. Co. Maritime Commission C 4-S-B 2 Type. Beds for 802 patients. Air conditioned throughout. Sanctuary commissioned June 20, 1945. AH 15, 12, 16, 17, 14, Benevolence sank after collision with freighter off San Francisco Aug. 1950. Consolation, Haven and Repose have a flight deck aft (square red cross landing platform) for the reception and air evacuation of wounded by helicopter. Green stripe removed from all hospital ships in 1953. Sanctuary and Tranquility out of commission, in reserve.

### Surveying Ships (AGS).

2 Attack Cargo Ship Type.



MAURY.

Added 1954, U.S. Navy, Official.

**MAURY** (ex-Renate)

**TANNER** (ex-Pamina)

Displacement : 4,203 tons (6,500 tons full load)  
 Dimensions : 400 (w.l.), 426 (o.a.) × 58 × 17 (max.) feet  
 Guns : 8—4J mm. AA., 20 mm. AA.  
 Machinery : Westinghouse turbo-electric. 2 shafts. S.H.P. : 6,000 = 17 kts.  
 Boilers : 2 Wickes

Notes.—AGS 16 (ex-AKA 36) and AGS 15 (ex-AKA 34), respectively. Both launched 1944 by Walsh-Kaiser Co. Inc., Providence, R.I. Converted in 1946. Helicopter flight deck on stern.

### 2 Seaplane Tender Type.



REHOBOTH.

1953, P. Sweeney.

**REHOBOTH** (8 Nov. 1942)

**SAN PABLO** (31 Mar. 1942)

Displacement : 1,766 tons (2,800 tons full load)  
 Dimensions : 310½ (o.a.) × 41 × 13½ (max.) feet  
 Guns : 1—5 inch, 38 cal. (San Pablo 2—5 inch), 5—40 mm. AA.  
 Machinery : Fairbanks-Morse diesel-electric. 2 shafts. B.H.P. : 7,080 = 18.2 kts.  
 Complement : 215

Notes.—Former Seaplane Tenders (Small). These vessels were reclassified as AGS and assigned to duties as deep-sea hydrographic surveying ships under the technical control of the Hydrographer. AGS 50 and 30, respectively. Launch dates above. Built by Lake Washington Shipyard and Associated Shipbuilders, respectively.

## U.S.A.—Surveying Ships, Minelayers, Submarine and Seaplane Tenders, etc.

### Surveying Ships—continued.

#### 4 Fleet Minesweeper Type.

**PREVAIL** (13 Sep. 1942)

**PURSUIT** (12 June, 1942)

Displacement : 890 tons (1,250 tons full load)  
Dimensions : 221½ (o.a.) × 32½ × 11 (max.) feet  
Guns : 1—3 inch d.p., 2—40 mm. AA.  
Machinery : Diesel-electric. 2 shafts. B.H.P. : 3,532 = 18 kts.  
Complement : 100

**REQUISITE** (25 July, 1942)

**SHELDRAKE** (12 Feb. 1942)

Notes.—Former minesweepers AM 107, AM 108, AM 109 and AM 62 respectively, reclassified as surveying vessels, AGS 20, AGS 18, AGS 19 and AGS 17 early in 1952. Launch dates above

### Degaussing Vessels.

**ADG 8** (ex-PCE 876, 30 Sep. 1943)

**ADG 9** (ex-PCE 879, 1 Sep. 1943)

Displacement : 640 tons (900 tons full load)  
Dimensions : 184½ (o.a.) × 33 × 9½ feet  
Machinery : Diesel. 2 shafts. B.H.P. : 2,400 = 16 kts.

**ADG 10** (ex-PCE 893, 14 Jan. 1944)

**ADG 11** (ex-Drake, ex-AM 359, 12 Aug. 1944)

Note.—To be named in the near future. ADG 11 (active) 1,710 H.P. = 15 kts.

### Auxiliary Minelayers.



ACM 15.

1943, Mr. W. H. Davis.

**ACM**

**11** (ex-MP 12, Brig. Gen. Royal T. Frank)

**12** (ex-MP 10, Major Gen. Erasmus Weaver)

**13** (ex-MP 14, Col. Horace F. Spurgeon)

**ACM**

**14** (ex-Major Samuel Ringold)

**15** (ex-Major General Wallace F. Randolph)

**16** (ex-MP 13, Colonel Alfred A. Maybach)

Displacement : 910 tons light (1,315 tons full load)  
Dimensions : 176 (w.l.), 189 (o.a.) × 37 × — feet  
Machinery : Skinner reciprocating Unaflo

ACM 11-13 2 shafts. H.P. : 1,200

ACM 14-16 1 shaft. H.P. : 630

### Motor Mine Planters.

**YMP**

**1** (ex-JMP 70)

**YMP**

**2** (ex-Sgt. Truman O. Olson)

Notes.—These two vessels are ex-Army Junior Mine Planters. Now in Navy List and rated as service craft. Small Motor Mine Planters L 1, L 2, L 3, L 4, are attached to ACM 12 and C-6969, C-6971, C-6972 (ex-L 74) to ACM 13. On 23 Nov. 1949, functions of controlled minelaying were transferred from the Army to the Navy, senior planters (MP) and junior planters (JMP) being reclassified.

### Submarine Tenders.

**EURYALE**

Displacement : 8,282 tons (15,400 tons full load)  
Dimensions : 492½ (o.a.) × 69½ × 25 feet  
Guns : 1—5 inch, 38 cal., 4—3 inch, 50 cal.  
Machinery : Geared turbine. S.H.P. : 8,500 = 16.5 kts.

Note.—No. AS 22. Modified C3 type. Out of commission, in reserve.

#### 7 "Fulton" Class.



ORION.

1950, U.S. Navy, Official.

4 Mare Island Navy Yard

**FULTON** (Dec. 17, 1940)

**SPERRY** (Dec. 17, 1941)

**BUSHNELL** (Sept. 14, 1942)

**HOWARD W. GILMORE** (ex-Neptune, Sept. 16, 1943)

1 Puget Sound Navy Yard

**NEREUS** (Feb. 12, 1945)

2 Moore Dry Dock Co., Oakland, Calif.

**ORION** (Oct. 14, 1942)

**PROTEUS** (Nov. 12, 1942)

Displacement : 9,734 tons (18,000 tons full load)  
Dimensions : 530½ (o.a.) × 73½ × 25½ (max.) feet  
Guns : 4—5 inch, 10—40 mm. AA., 20—20 mm. AA.  
Machinery : G.M. Diesels with electric drive. B.H.P. : 11,200 = 15.4 kts.  
Complement : 1,300

Notes.—Fulton authorised under 1938 Programme, others under 1940. (AS 11, 21, 15-19.) Ships vary in detail.

#### 4 "Aegir" Class.

**AEGIR**

**ANTHEDON**

**APOLLO**

**CLYTIE**

Displacement : 8,100 tons (16,100 tons full load)  
Dimensions : 492 (o.a.) × 69½ × 26½ (max.) feet  
Guns : 1—5 inch, 38 cal., 4—3 inch, 50 cal.  
Machinery : Turbine. S.H.P. : 8,500 = 18.4 kts.

Notes.—Nos. 23-26. C3-S-A2 type. Out of commission, in reserve.

#### 2 "Griffin" Class.



PELIAS.

1952, U.S. Navy Official.

**GRIFFIN** (ex-Mormacpenn, Nov. 10 1939)

**PELIAS** (ex-Mormacyork, Nov. 14 1939)

Displacement : 8,600 tons (14,500 tons full load)  
Dimensions : 492 × 69½ × 24½ (max.) feet  
Guns : 4—3 inch, 50 cal.  
Machinery : 4 sets Busch-Sulzer Diesels. B.H.P. : 8,500 = 16.5 kts.  
Complement : 1,513

Notes.—C3 Cargo type. Nos. AS 13, 14. Out of commission, in reserve.

### Fleet Replenishment Ship (AOR)

#### 1 Ex-German Type.

**CONECUH** (ex-Dithmarchen)

Builders : F. Schichau, Danzig, Poland.  
Launched : 1938

Displacement : 5,730 tons (Navy light) 15,000 tons standard, 20,500 tons full load  
Dimensions : 584 (o.a.) × 72½ × 30½ feet  
Machinery : Geared Turbines. 2 shafts. S.H.P. : 22,000 = 21 kts.

Notes.—Redesignated AOR 110 in 1952. Formerly AO 110 (ex-IX 301). Former German U-Boat attendant oiler and supply ship of 10,847 tons gross register, taken over by U.S. Navy and commissioned 1946. Sister ship of H.M.S. *Bulawayo*. Can carry 10,000 tons of oil fuel, 400 tons lubricating oil. Commissioned March 1953 to "test a theory of one-stop replenishment. This ship, in addition to fuel, will carry stores and ammunition. The lesson to be learned from the ship could greatly affect future auxiliary construction and employment, it is officially stated.

### Seaplane Tenders (Small).

#### 14 "Barnegat" Class.



DUXBURY BAY.

1953, A. & J. Pavia.

**BARNEGAT**  
**CORSON**  
**DUXBURY BAY**  
**FLOYDS BAY**  
**GARDINERS BAY**

**GREENWICH BAY**  
**ONSLAW**  
**ORCA**  
**OYSTER BAY**  
**SAN CARLOS**

**SHELIKOF**  
**SUISUN**  
**TIMBALIER**  
**VALCOUR**

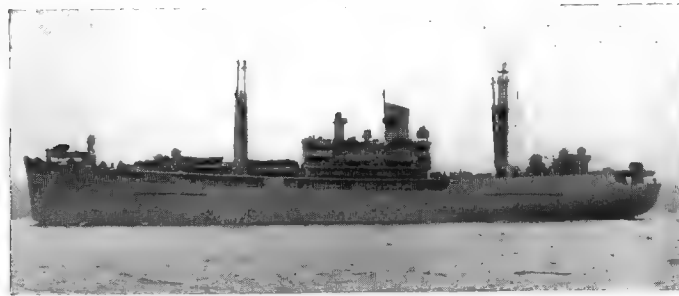
Displacement : 1,766 tons (2,800 tons full load)  
Dimensions : 300 (w.l.), 310½ to 311½ (o.a.) × 41 × 13½ (max.) feet  
Guns : 1—5 inch, 38 cal., 5—40 mm. AA. (but guns vary)  
Machinery : 2 sets Diesels. 2 shafts. B.H.P. : 6,080 = 18.2 kts.  
Complement : 215

Notes.—Original main armament of 4—5 inch was severely reduced to save top weight. Stern armament varies: *Suisun* none on stern, *Onslow* 1—5 inch, 38 cal., open mount, *Floyds Bay* quadruple 40 mm. AA. *Absecon*, *Barataria*, *Bering Strait*, *Casco*, *Castle Rock*, *Chincoteague*, *Cook Inlet*, *Coos Bay*, *Half Moon*, *Humboldt*, *Mackinac*, *Maragorda*, *Rockaway*, *Unimak*, *Yakutat* lent to Coast Guard for duty as weather ships. *Rehoboth* and *San Pablo* fitted for oceanographical surveying. Other ships of this class have been adapted for various duties. *Oyster Bay* is former Motor Torpedo Boat Tender (AGP6).

No.	Name	Builders	Launched
AVP 10	Barnegat	Puget Sound	25 May, 1941
28	Oyster Bay		7 Sep. 1942
37	Corson		15 July 1944
38	Duxbury Bay		2 Oct. 1944
40	Floyds Bay	Lake Washington Shipyard	28 Jan. 1945
39	Gardiners Bay		2 Dec. 1944
41	Greenwich Bay		18 Mar. 1945
48	Onslow		20 Sept. 1942
49	Orca	Shipyard	4 Oct. 1942
51	San Carlos		20 Dec. 1942
52	Shelikof		31 Jan. 1943
53	Suisun		14 Mar. 1943
54	Timbalier	Shipyard	18 Apr. 1943
55	Valcour		5 June, 1943

## Destroyer Tenders.

### 10 "Everglades" Class.



GRAND CANYON 1947, U.S. Navy, Official.

**ARCADIA** (Nov. 19, 1944)  
**BRYCE CANYON** (7 Mar. 1946)  
**EVERGLADES** (Jan. 28, 1945)  
**FRONTIER** (March 25, 1945)  
**GRAND CANYON** (April 27, 1945)

**ISLE ROYALE** (Sep. 19, 1945)  
**KLONDIKE** (Aug. 12, 1944)  
**SHENANDOAH** (March 29, 1945)  
**TIDEWATER** (June 30, 1945)  
**YELLOWSTONE** (April 12, 1945)

Displacement : 8,165 tons (16,635 tons full load)  
 Dimensions : 465 (w.l.), 492 (o.a.)  $\times$  69½  $\times$  27½ feet  
 Guns : 1—5 inch, 4—3 inch, 4—40 mm. AA.  
 Machinery : Geared turbines. S.H.P. : 8,500 = 18.4 kts.  
 Boilers : 2 Foster-Wheeler or Babcock & Wilcox  
 Complement : 826

Notes.—By Todd Shipyards, and other builders. Nos. AD 23, 36, 24, 25, 28, 29, 22, 26, 31, 27, respectively. Three other ships (*Arrowhead*, *Canopus*, *New England*) were cancelled in 1945, and a fourth (*Great Lakes*) sold. *Frontier* commissioned March 2, 1946. *Bryce Canyon* completed Dec. 20, 1949.

### 5 "Dixie" Class.



DIXIE. Added 1954, U.S. Navy, Official.

2 New York S.B. Corpn.

3 Tampa S.B. Co.

**DIXIE** (May 27, 1939)  
**PRAIRIE** (Dec. 9, 1939)

**PIEDMONT** (Dec. 7, 1942)  
**SIERRA** (Feb. 23, 1943)  
**YOSEMITE** (May 16, 1943)

Displacement : 9,450 tons (17,176 tons full load)  
 Dimensions : 520 (w.l.), 530½ (o.a.)  $\times$  73½  $\times$  25½ feet  
 Guns : 4—5 inch, 38 cal., 8—40 mm. AA., 23—20 mm. AA.  
 Machinery : Geared turbines. 2 shafts. S.H.P. : 11,000 = 19.6 kts.  
 Complement : 1,262 (war)

Notes.—Nos. AD 14, 15, 17, 18, 19 respectively. *Piedmont* commissioned Jan. 5, 1944.

## Destroyer Tenders—continued.

### CASCADE

Launched : 7 June, 1942  
 Displacement : 9,800 tons (16,600 tons full load)  
 Dimensions : 492 (o.a.)  $\times$  69½  $\times$  27½ (max.) feet  
 Guns : 2—5 inch, 38 cal., 6—40 mm. AA.  
 Machinery : Turbines. S.H.P. : 8,500 = 18.4 kts.  
 Complement : 860

Notes.—No. AD 16. Built by Western Pipe & Steel Co., San Francisco.



HA MUL. 1947, Wright & Logan.

**HAMUL** (ex-Dr. Lykes, April 6, 1940) **MARKAB** (ex-Mormacpenn, Dec. 21, 1940)  
 Displacement : 8,560 tons (14,800 tons full load)  
 Dimensions : 465 (pp.), 492 (o.a.)  $\times$  69½  $\times$  24½ feet  
 Guns : 1—5 inch, 4—3 inch, 4—40 mm. AA.  
 Machinery : Geared turbines. S.H.P. : 8,500 = 18.4 kts.  
 Boilers : 2 Foster-Wheeler  
 Complement : 857

Note.—Nos. AD 20, 21, respectively.

## Ammunition Ships.



WRANGELL. 1946, courtesy Derek Mercer, Esq.

**DIAMOND HEAD** (Feb. 3, 1945) **PARICUTIN** (Jan. 30, 1945)  
**FIREDRAKE** (ex-Winged Racer, May. 12, 44) **VESUVIUS** (ex-Gamecock, May. 26, 44)  
**GREAT SITKIN** (Jan. 26, 1945) **WRANGELL** (Apr. 16, 1944)  
**MOUNT KATMAI** (Jan. 6, 1945)  
 Displacement : 15,295 tons (full load)  
 Dimensions : 435 (w.l.), 459½ (o.a.)  $\times$  63  $\times$  28½ feet  
 Guns : 1—5 inch, 4—3 inch, 4—40 mm. AA.  
 Machinery : Geared turbines. S.H.P. : 6,000 = 16.4 kts.  
 Complement : 267

Note.—Nos. AE 19, 14, 17, 16, 18, 15, 12, respectively.

## Ammunition Ships—continued.

### 2 New Construction.

Displacement : 10,000 tons (17,400 tons full load)  
 Dimensions : 500  $\times$  72  $\times$  — feet  
 Machinery : Steam turbines. 1 shaft. H.P. : 12,500

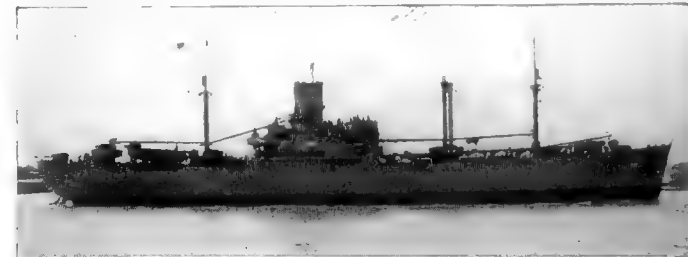
Notes.—The construction of two new ammunition ships (AE) was authorised in 1954. Design contract was awarded to Bethlehem Steel Co., Quincy, Mass. Designed especially to meet the strenuous requirements of present day rapid replenishment at sea. Built from the hull up as Navy ships. Will have elevators for internal handling of ammunition and the most up-to-date methods of stowage.



SHASTA. 1944, U.S. Navy, Official.

**AKUTAN** (Sep. 17, 1944) **MOUNT BAKER** (ex-Kilauea, ex-Surprise, Aug. 6, 1940)  
**LASSEN** (ex-Shooting Star, Jan. 1, 1940) **RAINER** (ex-Rainbow, Mar. 1, 1941)  
**MAUNA LOA** (April 14, 1943) **SHASTA** (ex-Comet, July 9, 1941)  
**MAZAMA** (Aug. 15, 1943)  
 Displacement : 5,220 to 6,350 tons (14,225 tons full load)  
 Dimensions : 435 (w.l.), 459 (o.a.)  $\times$  63  $\times$  26½ feet  
 Guns : 1—5 inch, 4—3 inch, 4—40 mm. AA.  
 Machinery : 2 Nordberg Diesels. B.H.P. : 6,000 = 15.3 kts.  
 Complement : 281

Notes.—All seven built by Tampa S.B. Co. Nos. AE 13, 3, 8, 9, 4, 5, 6, respectively. Modified C2 type, converted by Navy. Carries 5,000 tons of cargo. War loss : *Mount Hood*.



SANGAY. Added 1948, U.S. Navy, Official.

**SANGAY** (ex-Cape Sable)

Launched : 5 Apr. 1942  
 Displacement : 5,826 tons (11,653 tons full load)  
 Dimensions : 390 (w.l.), 412½ (o.a.)  $\times$  60  $\times$  23½ feet  
 Guns : 1—5 inch, 4—3 inch, 4—40 mm. AA.  
 Machinery : Nordberg Diesel. B.H.P. : 4,000 = 14.5 kts.  
 Complement : 308

Notes.—No. AE 10. Maritime Commission CI-A (Diesel) type.

**FOMALHAUT** (ex-Cape Lookout)

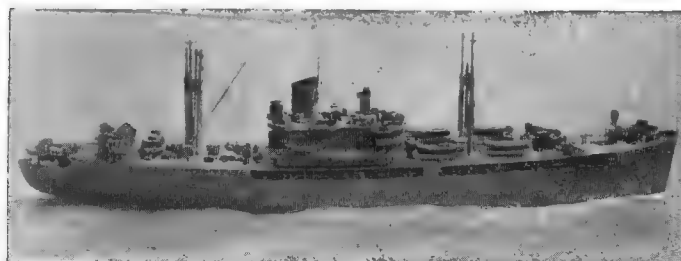
Launched : 25 Jan. 1941  
 Displacement : 5,826 tons (11,653 tons full load)  
 Dimensions : 390 (w.l.), 412½ (o.a.)  $\times$  60  $\times$  23½ feet  
 Guns : 1—5 inch, 4—3 inch, 4—40 mm. AA.  
 Machinery : Nordberg Diesel. B.H.P. : 4,150 = 14.8 kts.  
 Complement : 308

Notes.—Former No. AK 22 redesignated No. AE20. Type CI-A similar to Sangay above. Both built by Penn Shipyards, Beaumont, Texas.

## U.S.A.—Repair Ships.

### Repair Ships.

#### 2 "Amphion" Class.



AMPHION.

Added 1948, U.S. Navy, Official.

AMPHION (May 15, 1945)

CADMUS (1945)

Displacement : 7,826 tons (16,900 tons full load)  
Dimensions : 456 (w.l.), 492 (o.a.) × 70 × 27½ feet  
Guns : 2—5 inch, 8—40 mm. AA.  
Machinery : Westinghouse turbines. S.H.P. : 8,500 = 17 kts.  
Boilers : 2 Foster-Wheeler  
Complement : 921

Notes.—Nos. AR 13, 14, Launch dates above. Deucalion and Mars, of this type, cancelled.

#### 17 "EC 2" Type.



WEBSTER.

Added 1948, U.S. Navy, Official.

CEBU (ex-Francis P. Duffy)  
CHOURRE (ex-Dumaran)  
CULEBRA ISLAND (ex-John F. Goucher)  
DIONYSUS  
HOOPER ISLAND (ex-Bert McDowell)  
KERMIT ROOSEVELT (ex-Deal Island,  
Oct. 5, 1944)

LAERTES  
LUZON (ex-Samuel Bowles)

Displacement : 5,766 tons (14,350 tons full load)  
Dimensions : 416 (w.l.), 441½ (o.a.) × 57 × 23 (mean) feet  
Machinery : Triple expansion. I.H.P. : 2,500 = 12.5 kts.  
Boilers : 2 Babcock & Wilcox.

Notes.—Liberty ships. Dionysus, Laertes, Xanthus, numbered AR 21, 20, 19; Chourre, Webster (Aircraft Repair Ships), ARV 1, 2; others are Internal Combustion Engine Repair Ships, ARG 6, 7, 17, 16, 2, 8, 3, 9, 5, 10, 11, 4, respectively. Chourre is serving as an Aviation Supply Ship.

#### 46 Ex-LST Type.



MENELAUS.

1953, A. & J. Pavia.

ACHELOUS (ex-LST 10)	ARL 11	MEGARA (ex-LST 1095)	ARVA 6
ADONIS (ex-LST 83)	ARL 4	MENELAUS (ex-LST 971)	ARL 13
AMPHITRITE (ex-LST 1124)	ARL 29	MIDAS (ex-LST 524)	ARB 5
AMYCUS (ex-LST 489)	ARL 2	MINOS (ex-LST 644)	ARL 14
ARISTAEUS (ex-LST 329)	ARB 1	MINOTAUR (ex-LST 645)	ARL 15
ASKARI (ex-LST 1131)	ARL 30	MYRMIDON (ex-LST 948)	ARL 16
ATLAS (ex-LST 231)	ARL 7	NUMITOR (ex-LST 954)	ARL 17
AVENTINUS (ex-LST 1092)	ARVE 3	OCEANUS (ex-LST 328)	ARB 2
BELLEROPHON (ex-LST 1132)	ARL 31	PANDEMUS (ex-LST 650)	ARL 18
CHIMAERA (ex-LST 1137)	ARL 33	PENTHEUS (ex-LST 1115)	ARL 20
CHLORIS (ex-LST 1094)	ARVE 4	PHAEON (ex-LST 15)	ARB 3
CORONIS (ex-LST 1003)	ARL 10	POSEIDON (ex-LST 1037)	ARL 12
CREON (ex-LST 1036)	ARL 11	PROSERPINE (ex-LST 1116)	ARL 21
DAEDALUS (ex-LST 1143)	ARL 25	QUIRINUS (ex-LST 1151)	ARL 39
DEMETER (ex-LST 1121)	ARB 10	ROMULUS (ex-LST 926)	ARL 22
DIOMEDES (ex-LST 1119)	ARB 11	SARPEDON (ex-LST 956)	ARB 72
EGERIA (ex-LST 136)	ARL 8	SATYR (ex-LST 852)	ARL 23
ENDYMION (ex-LST 513)	ARL 9	SPHINX (ex-LST 963)	ARL 24
FABIUS (ex-LST 1093)	ARVA 5	STENTOR (ex-LST 858)	ARL 26
GORDIUS (ex-LST 1145)	ARL 36	TELEMON (ex-LST 957)	ARB 8
HELIOS (ex-LST 1127)	ARB 12	TYPHON (ex-LST 1118)	ARL 28
INDRA (ex-LST 1147)	ARL 37	ULYSSES (ex-LST 967)	ARB 9
KRISHNA (ex-LST 1149)	ARL 38	ZEUS (ex-LST 132)	ARB 4

Displacement : 1,625 tons  
Dimensions : 316 (w.l.), 328 (o.a.) × 50 × 11 feet  
Guns : 8—40 mm. AA.  
Machinery : Diesel. 2 shafts. B.H.P. : 17,000 = 11 kts.

Notes.—Four types: 11 ARB, 31 ARL, 2 ARV and 2 ARVE. All launched 1942-45. Rated as Repair Ships for Battle Damage (ARB 1-5, 7-12) for Landing Craft (ARL 1, 2, 4, 7-18, 20-24, 26, 28-31, 33, 35-39), and Aircraft Repair Ships for Aircraft Engines (ARVE 3-4), Airframes (ARVA 5, 6). Agenor (ex-LST 490) ARL 3 was ceded to France 2 Mar. 1951. Patrolcruiser ARL 19, (ex-LST 955) transferred to Turkey 1952.

#### 4 "Vulcan" Class.



VULCAN.

1942 U.S. Navy, Official.

AJAX (Aug. 22, 1942)  
HECTOR (Nov. 11, 1942)

JASON (April 3, 1943)  
VULCAN (Dec. 14, 1940)

Displacement : 9,140 tons (16,200 tons full load)  
Dimensions : 520 (w.l.), 529½ (o.a.) × 73½ × 23½ feet  
Guns : 4—5 inch, 8—40 mm. AA.  
Machinery : Geared turbines. 2 shafts. S.H.P. : 11,000 = 19.2 kts.  
Boilers : 4 Babcock & Wilcox 3-drum  
Complement : 1,297 (war)

Notes.—Vulcan built by New York S.B. Corp. under 1939 Programme. Others by Los Angeles S.B. & D.D. Corp. under 1940 Programme. All carry a most elaborate equipment of machine tools to undertake repairs of every description. Jason (ARH 1) is rated as heavy hull repair ship. Others are numbered AR 5-7.

#### 2 "Delta" Class.



BRIAREUS.

Added 1954, U.S. Navy, Official.

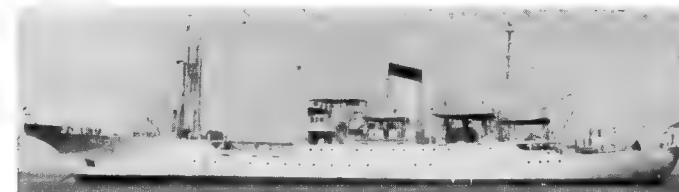
BRIAREUS (ex-Hawaiian Planter)

DELTA (ex-Hawaiian Packer)

Displacement : 8,975 tons (14,500 tons full load)  
Dimensions : 645½ (pp.), 490½ (o.a.) × 69½ × 24½ feet  
Guns : 1—5 inch, 4—3 inch, 4—40 mm. AA.  
Machinery : Geared turbines. S.H.P. : 8,500 = 17 kts.  
Boilers : 2 Foster-Wheeler and 2 Babcock & Wilcox, respectively.

Notes.—Both launched 1941. Nos. AR 12, 9.

#### Cable Repair Ships.



NEPTUNE.

1954, U.S. Navy, Official.

ARC 2 NEPTUNE (ex-William H. G. Bullard)

Measurement : 3,929 tons gross, 4,860 tons deadweight  
Dimensions : 322 × 47 × 33½ feet  
Machinery : Reciprocating Unaflow engines. 2 shafts.  
I.H.P. : 4,800 = 14 kts.

Notes.—Built by Pusey and Jones Corp., Wilmington, Del. Launched 1945. Completed Feb. 1946. Acquired from Maritime Administration 1953 1954. S3-S2-BP1 type.

ARC 1 PORTUNUS (ex-LSM 275)

Displacement : 743 tons (1,095 tons full load).  
Dimensions : 203½ (o.a.) × 34½ × 8½ feet  
Machinery : Diesel. 2 shafts. B.H.P. : 2,800 = 12 kts.  
Complement : 41

Note.—Cable Repairing or Laying Ship. Converted 1952. ARC 1 is the Navy's first commissioned cable ship specially built to lay and repair "sofar" cables for the "sofar" search and rescue system, and makes surveys for prospective hydrophone sites. Has new superstructure on centre line, kingposts fore and aft to support booms. Bow and stern sheaves can handle cable to depths of 700 fathoms. Accepted 19 Aug. 1952. "Sofar" is a device which picks up underwater disturbances from thousands of miles away and transmits them to stations where they can be triangulated, and the position from which they have come can be calculated. Named Portunus in 1953.

NASHAWENA (YAG 35, ex-AG 142)

Displacement : 602 tons standard  
Dimensions : 154 (o.a.) × 36 × 6 feet  
Speed : 10 kts. (trials)

Notes.—Wooden cable ship. Officially classified as District Miscellaneous Auxiliary. Out of commission, in reserve.

## Aviation and Ordnance Supply Ships.

### JUPITER (ex-Santa Catalina, ex-Flying Cloud)

Displacement : 6,050 tons (13,860 tons full load)  
Dimensions : 459 (o.a.) × 63 × 26½ (max.) feet  
Guns : 1—5 inch, 4—3 inch  
Machinery : Turbine : S.H.P. : 6,000 = 16.5 kts.

Notes.—Launched 30, Sept., 1939. No. AVS 8 (AK 43). (C2-Cargo) type. Aviation Supply Ship. Chourre (see previous page, "EC 2" type) is also Aviation Supply Ship.

### CHIMON (ex-LST 1102)

### COLINGTON (ex-LST 1085)

### ELECTRON (ex-LST 1070)

### LEAGUE ISLAND (ex-LST 1097)

### PROTON (ex-LST 1078)

Notes.—AKS 31, 29, 27, 30, 28. Formerly AG, 150, 148, 146, 149, 147, respectively. Chimon and League Island are classed as Ordnance Fleet Issue Supply Ships. Electron and Proton are Electronics Repair Ships.

## General Stores Issue Ships.

### 6 "Island" Class.

#### AVERY ISLAND BELLE ISLE

Displacement : 5,766 tons (14,350 tons full load)  
Dimensions : 422½ (pp.), 441½ (o.a.) × 57 × 23 feet  
Guns : 1—5 inch, 4—40 mm. AA.  
Machinery : Triple expansion. I.H.P. : 2,500 = 12.5 kts.  
Boilers : 2 Babcock & Wilcox

#### COASTER'S HARBOR CUTTYHUNK ISLAND

#### INDIAN ISLAND KENT ISLAND

Notes.—All launched 1944. Liberty ships. AKS 24, 21, 22, 23, 25, 26. Stores Issue Ships. Out of commission, in reserve.

### 3 "Mercury" Class.



MERCURY.

1946, Mr. W. H. Davis.

### CASTOR (ex-Challenge)

### MERCURY (ex-Mormactern, ex-Lightning)

Displacement : 6,365, 5,994, 6,335 tons light, respectively (13,860 to 14,400 tons full load). Cargo capacity : 5,400 tons  
Dimensions : 435 (pp.), 459½ (o.a.) × 63 × 26½ (max.) feet  
Guns : 1—5 inch, 4—3 inch  
Machinery : Geared turbines. S.H.P. : 6,000 = 16.4 kts.  
Boilers : 2 Babcock & Wilcox

### POLLUX (ex-Nancy Lykes)

### ALTAIR (ex-Aberdeen Victory)

Displacement : 4420 tons light (15,580 tons full load)  
Dimensions : 455½ (o.a.) × 62 × 28½ (max.) feet  
Guns : 4—3 inch  
Machinery : Geared turbines. S.H.P. : 8,500 = 16.5 kts.

Notes.—VC 2-AP 3 type. Laid down 1944. AKS 32 (ex-AK 257). Reclassified as AKS 1952.

## Store Ships. New Construction.

### AF 58

Displacement : 15,540 tons full load  
Measurement : 10,850 tons gross  
Dimensions : 475 (w.l.), 502 (o.a.) × 72 × 43½ (depth) feet  
Machinery : Steam turbine. 1 shaft. S.H.P. : 12,500

Notes.—Contract awarded to Ingall's Shipbuilding Co., Pascagoula 13 Aug. 1953. R3-S-4A type. \$12,440,000 each. To complete in 660 and 700 days after contract date.

### 3 "Alstede" Class.

#### ALSTEDE

Displacement : 6,914 tons (15,500 tons full load)  
Dimensions : 459½ × 63 × 28 feet  
Machinery : Turbine. S.H.P. : 6,000 = 16 kts.

Notes.—Nos. AF 48, AF 55, and AF 49, respectively, launched 1945 and 1946. R2-S-RV) design reefer type. Aludra acquired for conversion by Navy.

### 10 "Adria" Class.



LIOBA.

1953, P. Sweeney.

#### ADRIA AREQUIPA BONDIA (U.S.N.S.)

#### CORDUBA KARIN LAVRENTIA (ex-Wall and Crown)

#### LIOBA MALABAR MERAPI VALENTINE (U.S.N.S.)

Displacement : 3,139 tons (7,534 tons full load)  
Dimensions : 320 (w.l.), 338½ (o.a.) × 50 × 21 (max.) feet  
Guns : 1—3 inch  
Machinery : Nordberg Diesel. B.H.P. : 1,700 = 11.5 kts.

Notes.—All launched 1944. AF 30-33, 36-38, 42, 47. Kerstin and Latona returned to Maritime Commission. 2,100 tons cargo. RI-M-AV 3 type. Bondia and Valentine assigned to Military Sea Transportation Service, 1 July 1951, unarmed.

### 3 "Eagle" Type.



GOLDEN EAGLE.

1953, Skyfotos

#### T-AF 50 BALD EAGLE

Displacement : 7,430 tons (12,800 tons full load)  
Dimensions : 459½ (o.a.) × 63 × 24 (max.) feet  
Machinery : Turbine. S.H.P. : 6,000 = 16.4 kts.

#### T-AF

#### 51 BLUE JACKET

#### T-AF

#### 52 GOLDEN EAGLE

Notes.—All built by Moore Drydock Co. Launched 1942. Military Sea Transportation Service Ships, designated USNS. MC. Type C2-S-B1.

## Store Ships—continued. 2 "Graffias" Type.



HYADES.

#### GRAFFIAS (ex-Topa Topa)

Displacement : 6,313 tons light (15,300 tons full load)  
Dimensions : 445 (pp.), 463½ (o.a.) × 63 × 28 feet  
Guns : 1—5 inch, 4—3 inch  
Machinery : Geared turbines. S.H.P. : 6,000 = 15.5 kts.  
Boilers : 2 Babcock & Wilcox  
Complement : 252

Notes.—AF 29 and 28. Launched 1943 and 1942, respectively. Cargo capacity : 5,300 tons



ALDEBARAN.

1952 Mr. Frank Uhlig.

#### ALDEBARAN (ex-Staghound)

Displacement : 6,501 tons (13,860 tons full load)  
Dimensions : 435 (w.l.), 459½ (o.a.) × 63 × 25½ (max.) feet  
Guns : 1—5 inch, 4—3 inch  
Machinery : Geared turbines. S.H.P. : 6,000 = 16.4 kts.  
Boilers : 2 Babcock & Wilcox

Notes.—Launched June 21, 1939. No. AF 10. C-2 Cargo (S) type.

#### POLARIS

Displacement : 6,350 tons (14,225 tons full load)  
Dimensions : 459 (o.a.) × 63 × 26½ (max.) feet  
Machinery : Diesel. B.H.P. : 6,000 = 15.3 kts.  
Cargo capacity : 5,000 tons

Notes.—Launched 22 Apr. 1939. No. AF 11. C2-Cargo (D) type.

## 2 "Victory" Type.

#### DENEbola (ex-Hibbing Victory)

Displacement : 6,700 tons light (12,130 tons full load)  
Measurement : 8,000 tons deadweight  
Dimensions : 455 × 62 × 29 feet  
Guns : 8—3 inch, 50 cal. automatic AA. (twin mounts)  
Machinery : Westinghouse geared turbines. 1 shaft. S.H.P. : 8,500 = 17 kts.  
Complement : 225

Notes.—Maritime Administration ships acquired by U.S. Navy, 1952, for conversion to refrigerator store ships. AF 56 and AF 57, respectively. VC2-S-AP 3 type. Built 1944 by Oregon Shipbuilding Co. Denebola commissioned 20 Jan. 1954 after conversion by Todd, Brooklyn, Regulus 3 Feb. 1954. Insulated holds, refrigerated system, quick acting hatch covers. Conversion cost \$8,000,000.

#### PICTOR (ex-Great Republic)

Notes.—Transferred from Maritime Administration to U.S. Navy. AF 54. C2-S-B1 type similar to R2-S-BV1 design, except that R2s were built as refers and C2s as cargo ships. Same type as "Eagle" class.



U.S.A.—Fleet Supply Ships.

Cargo Ships.

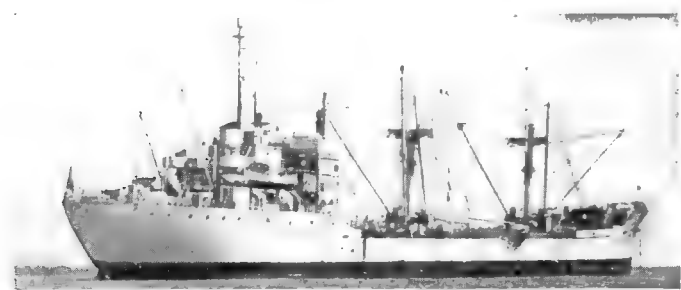
Note.—4 Liberty hull (EC2 S CI) cargo vessels are to be converted into radar pickets. These are a new conception in Navy shipbuilding plans. The radar picket vessels are for primary use in the continental defence system.

3 "Victory" Type.



ALCOR. 1953, A. & J. Pavia.  
**ALCOR** (ex-Rockland Victory)  
Displacement : 4,420 tons (Navy light), 15,580 tons full load)  
(Maritime Commission deadweight 10,850 tons)  
Dimensions : 455½ (o.a.) × 62 × 28½ (max.) feet  
Guns : 4—3 inch  
Machinery : Geared turbines. S.H.P. : 8,500 = 16.5 kts.  
Notes.—VC2-AP3 type. Laid down 1944. Reactivated for the Navy late 1951 from Maritime Administration Reserve Fleets. AK 259, 258, 260, respectively.

5 "Alcona" Class.



BELTRAMI. 1952, Harvey Gilston, Esq.  
**ALCONA BELTRAMI FARIBAULT GRAINGER SUSSEX**  
Displacement : 2,460 tons (7,450 tons full load)  
Dimensions : 320 (w.l.), 338½ × 50 × 21 (max.) feet  
Guns : 1—3 inch d.p.  
Machinery : Nordberg Diesel. B.H.P. : 1,750 = 11.5 kts.  
Notes.—All launched 1944, AK 157, 162, 179, 184, 213. CI-M-AVI type.

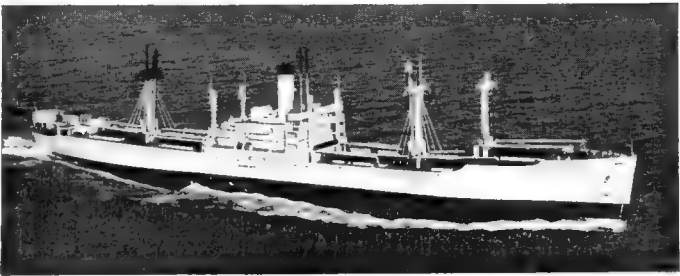
6 "Alchiba" Class.

**ALCHIBA** (ex-Charles E. Winsor) **CENTAURUS** (ex-Nathaniel Brown)  
**ALGORAB** (ex-Elisha Whitney) **CEPHEUS** (ex-Richard W. Dixie)  
**AQUARIUS** (ex-John D. Whidden) **SERPENS** (ex-William Lester)  
Dimensions : 259 (o.a.) × 42 × 19 feet  
Machinery : Triple expansion. 1 shaft. I.H.P. : 1,300 = 11 kts.  
Notes.—AK 261 to 266, respectively. N3-S-A2 type. Non-commissioned vessels on Navy List.

6 "Alcyone" Class.

**ALCYONE** (ex-FS 195) **ALMAACK** (ex-FS 283) **PAMINA** (ex-FS 528)  
**ALHENA** (ex-FS 257) **DEIMOS** (ex-FS 390) **RENATE** (ex-FS 547)  
Notes.—Same type as "Camano" class. Acquired from Army 1952. AK 37-42 respectively. All 12 above are on loan to R.O.K. but carry U.S.N. names and designation.

M.S.T.S. Cargo Ships. (USNS)



KINGPORT VICTORY 1952 Skyfotos  
4 Type VC2-S-AP3  
**T-AK 237 GREENVILLE VICTORY 238 HAITI VICTORY**  
Displacement : 6,770 tons (12,450 tons full load)  
Dimensions : 455 (o.a.) × 62 × 24 (max.) feet  
Machinery : Turbine. S.H.P. : 8,500 = 16.5 kts.  
9 Type VC2-AS-P2  
**T-AK 241 PRIVATE FRANCIS X. MCGRAW 242 SERGEANT ANDREW MILLER 243 SERGEANT ARCHER T. GAMMON 244 SERGEANT MORRIS E. CRAIN**  
Displacement : 6,700 tons (12,400 tons full load)  
Dimensions : 455 × 62 × 24 feet  
Machinery : Geared turbine. S.H.P. : 6,000 = 15.5 kts  
11 Type CI-M-AVI  
**T-AK 245 CAPTAIN ARLO L. OLSEN 246 COLONEL WILLIAM J. O'BRIEN 247 PRIVATE JOHN F. THORSON 248 SERGEANT GEORGE PATERSON 249 SHORT SPICE 250 PVT. FRANK J. PETRARCA**  
Displacement : 2,460 tons (7,450 tons full load)  
Dimensions : 338½ × 50 × 21 feet  
Machinery : Diesel. B.H.P. : 1,750 = 11.5 kts.  
Notes.—Colonel William J. O'Brien and Short Spice converted to heavy lift ships Aug.-Nov. 1954, AK 247 laid up in Atlantic Reserve Fleet 1954.



PVT. LEONARD C. BROSTROM. 1954, Skyfotos.  
1 Type C4-S-B1  
**T-AK 255 PVT. LEONARD C. BROSTROM 267 MARINE FIDDLER**  
(ex-Marine Eagle)  
Dimensions : 520 (o.a.) × 72 × 33 feet  
Machinery : Geared Turbine. S.H.P. : 9,000 = 17 kts.  
Notes.—Marine Fiddler built 1945, acquired from Maritime Administration Reserve Fleet 1952. Both converted to heavy lift ships for carrying locomotives and general cargo 1954.

2 Type N3-S-A1

**T-AK 87 SAGITTA** (ex-S.S. Moses Pike) **T-AK 89 VELA** (ex-S.S. Charles A. Raulett)  
Displacement : 5,202 tons full load  
Dimensions : 269½ × 42½ × 20½ (max.) feet  
Machinery : Diesel. 1 shaft. B.H.P. : 1,300 = 10.2 kts.  
Note.—Reinstated on the list of naval vessels and assigned to the Military Sea Transportation Service. Removed from Maritime Administration Reserve Fleet where they have been laid up since release by the Navy after Second World War.

Light Cargo Ships.

8 "Camano" Class.

**BANNER BRULE CAMANO** **DEAL ESTERO HEWELL** **JEKYL MARK RYER** **SHARPS TINGLES**  
Notes.—Small cargo carriers, taken over from Army. AKL 1, 2, 5, 6, 9, 10, 12, 13-14, 25, 28 (ex-AG 130-140, 143-145). FS type. Elba, Errol, Metomkin, Rcqre and Torry transferred to Interior Department. Armament : 20 mm. AKL 25, 28, named, armed and commissioned in 1952 (ex-USNS).

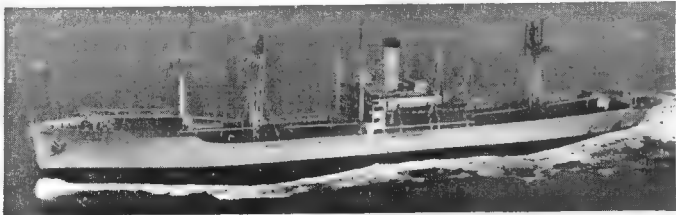
1 Coast Guard Type.

**REDBUD**  
Notes.—AKL 398 (WAGL). U.S. Coast Guard Tender. Launched 11 Sep. 1943, of "Basswood" class (see later page) transferred to Navy for special transport and supply service in Greenland, and in Feb. 1952 to Military Sea Transportation Service as multi-purpose freighter combination icebreaker, light cargo vessel and radio communications ship

M.S.T.S. Light Cargo Ships.

**T-AKL 15** (ex-FS 230) **T-AKL 20** (ex-FS 193) **T-AKL 26** (ex-FS 368) **T-AKL 32** (ex-FS 548)  
**16** (ex-FS 233) **21** (ex-FS 259) **27** (ex-FS 369) **33** (ex-FS 238)  
**17** (ex-FS 289) **22** (ex-FS 256) **29** (ex-FS 371) **34** (ex-FS 343)  
**18** (ex-FS 174) **23** (ex-FS 288) **30** (ex-FS 400) **35** (ex-FS 383)  
**19** (ex-FS 175) **24** (ex-FS 309) **31** (ex-FS 407) **36** (ex-FS 398)  
Notes.—Light Cargo Ships. All above are Military Sea Transportation Service Ships. Same type as "Camano" class. Several laid up in Reserve Fleets.

M.S.T.S. Aircraft Cargo and Ferry Ships.



LT. JAMES E. ROBINSON. 1953, Skyfotos.  
3 Type VC2-S-AP3  
**T-AKV 3 LIEUT. JAMES E. ROBINSON**  
Displacement : 6,720 tons (12,450 tons full load)  
Dimensions : 455 (o.a.) × 62 × 24 feet  
Machinery : Turbine. S.H.P. : 8,500 = 17.7 kts.

M.S.T.S. Coastal Transports.

4 Type CI-M-AVI  
**T-APC 116 SERGEANT JONAH E. KELLEY**  
(ex-Link Splice)  
Displacement : 2,460 tons (7,460 tons full load)  
Dimensions : 338½ × 50 × 21 feet  
Machinery : Diesel. B.H.P. : 1,750 = 11.5 kts.  
Notes.—Coastal Transports. All Military Sea Transportation Service ships (USNS).

# Oilers (AO).

## 6 New Construction.

AO 143 NEOSHO 144 MISSISSINAWA	AO 145 NASSAYAMPA 146 KAWISHIWI	AO 147 TRUCKEE 148 PONCHATOULA
Displacement : Dimensions : Machinery :	11,600 tons light (38,000 tons full load) 640 (w.l.), 655 (o.a.) × 86 × 35 (max.) feet G. E. turbines. 2 shafts. S.H.P. : 28,000 = 20 kts.	

Notes.—Officially announced that Navy plans to construct six fleet oilers. First, AO 143, awarded to Bethlehem Steel Company, Quincy, Mass. AO 144-148 awarded later to New York Shipbuilding Corporation, Camden, New Jersey, with the Bethlehem company's design as prototype.

## 56 "T2-SE" Types.



COSSATOT (now unarmed). Added 1943, U.S. Navy, Official.

ANACOSTIA (ex-Mission Alamo, Sept. 24, 1944)  
CACHE (ex-Stillwater), 1942  
CAHABA (ex-Lackawaxen, ex-Lackawapen), 1943  
CANEY (ex-Mission Los Angeles, Oct. 7, 1944)  
CEDAR CREEK  
COHOCTON (June 18, 1943)  
CHEPACHET (1943)  
COSSATOT (1942)  
COWANESQUE (1942)  
ESCAMBIA (1942)  
KENNEBAGO (1943)  
MASCOMA (1943)  
MILICOMA (ex-Conastega, Jan. 21, 1943)  
MUIR WOODS

OKLAWAHA  
PAMANSET (1943)  
PECOS (ex-Corsicana, 1942)  
PIONEER VALLEY  
SAPPA CREEK  
SARANAC  
SAUGATUCK (ex-Newton, 1942)  
SCHUYLKILL (ex-Louisburg, Feb. 16, 1943)  
SEBEC (1943)  
SHAWNEE TRAIL  
SOUBARISSEN (ex-Mission Santa Ana, 1944)  
SUAMICO (ex-Harlem Heights, 1941)  
TALLULAH (ex-Valley Forge, 1944)  
TAMALPAIS (ex-Mission San Francisco, 1944)  
TOMAHAWK (1943)

Notes.—Nos. AO 94, 67, 82, 95, 138, 101, 78, 77, 79, 80, 81, 83, 73, 139, 84, 85, 65, 140, 141, 74, 75, 76, 87, 142, 93, 49, 50, 96, 88. Cedar Creek is equipped with an aluminium portable aircraft cargo deck. All except Saranac (USS), on loan to U.S. Army, are assigned to Military Sea Transportation Service and designated USNS.

# Oilers—continued.

## "T2-SE" Types—continued.



MISSION SAN FERNANDO. 1953, Skyfotos.

MISSION BUENAVENTURA MISSION CAPISTRANO MISSION CARMEL MISSION DE PALA MISSION DOLORES MISSION LORETO MISSION LOS ANGELES MISSION PURISIMA MISSION SAN ANTONIO MISSION SAN CARLOS MISSION SAN DIEGO MISSION SAN FERNANDO MISSION SAN FRANCISCO	MISSION SAN GABRIEL MISSION SAN JOSE MISSION SAN JUAN MISSION SAN LUIS OBISPO MISSION SAN LUIS REY MISSION SAN MIGUEL MISSION SAN RAFAEL MISSION SANTA BARBARA MISSION SANTA CLARA MISSION SANTA CRUZ MISSION SANTA YNEZ MISSION SOLANO MISSION SOLEDAD MISSION SANTA ANA
Displacement : Dimensions : Machinery :	5,730 tons (22,380 tons full load) 503 (w.l.), 523½ (o.a.) × 68 × 30½ (max.) feet A 1 type: Turbo-electric. S.H.P. : 6,000 = 15.1 kts. A 2 type: S.H.P. : 10,000 = 16.2 kts. Boilers : 2 Babcock & Wilcox

Notes.—AO 111-137 respectively. T2-SE-A1 and T2-SE-A2 design. All above oilers are assigned to Military Sea Transportation Service and carry the prefix U.S.N.S. (U.S. Naval Ship). These ships are civilian manned, Navy-owned tankers, operated by commercial shipping firms under contract to the Navy. Oil capacity : 20,200 tons. Many are equipped with an aluminium portable aircraft cargo deck.

## 7 "T2-A" Type.



KENNEBEC. Added 1949, U.S. Navy, Official.

KANKAKEE (ex-Colina, 1941) *KENNEBEC (ex-Corsicana, 1940) *MATTAPONI (ex-Kalkay, 1942)	*MERRIMACK (ex-Caddo, 1940) MONONGAHELA (ex-Elkay, 1941) NECHES (ex-Askal, 1941) *TAPPAHANNOCK (ex-Jorkay, 1942)
Displacement : Dimensions : Guns : Machinery : Boilers :	21,580 tons (full load) 523½ (o.a.) × 68 × 30½ (max.) feet 8—40 mm. AA. Single turbine. S.H.P. : 12,000 = 16.7 kts. 2 Babcock & Wilcox

Notes.—Maritime Commission—Standard Oil. Nos. AO 39, 36, 41, 37, 42, 47, 43. All assigned MSTs designated USS.

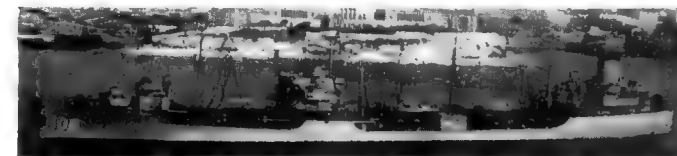
\* Several laid up in Navy reserve fleets 1954.

## 2 "T3-S-A1" Type.

*ENOREE (ex-Sachem, 29 Aug. 1942)	NIOBRARA (ex-Citadel, Nov. 28 1942)
Displacement : Dimensions : Guns : Machinery :	5,708 tons (22,030 tons full load) 501½ (o.a.) × 68 × 30½ (max.) feet 1—5 inch, 53 cal., 4—3 inch, 50 cal., 4—40 mm. AA. Turbines. 1 shaft. S.H.P. : 7,000 = 15.3 kts.

Notes.—AO 69, 72, respectively. Carry 127,000 barrels of oil.

## 5 "T3-S2-A3" Type.



WACCAMAW. 1953, A. & J. Pavia.

MISPILLION (1945) NAVASOTA (Aug. 30, 1945)	PASSUMPSIC (Oct. 31, 1945) PAWCATUCK (Jan. 1945)	WACCAMAW (1945)
Displacement : Dimensions : Guns : Machinery :	7,423 tons (25,440 tons full load) 553 (o.a.) × 75 × 32½ (max.) feet 1—5 inch, 38 cal., 4—3 inch, 50 cal., 12—40 mm. AA. Turbines. 2 shafts. S.H.P. : 13,500 = 18.3 kts.	

Notes.—AO 105, 106, 107, 108, 109, respectively. Cargo : 142,500 barrels of oil. Waccamaw of this class was to have been converted to fleet tanker replenishment, (AOR) but this project has been deferred indefinitely.

## 24 "T3-S2-A1" Type.



SALAMONIE. 1952, courtesy Godfrey H. Walker.

ALLAGASH (1945) ASHTABULA (1943) AUCILLA (1943) CACAPON (June 6, 1943) CALIENTE (Aug. 26, 1943) CALOOSAHATCHEE (1945) CANISTEO (1945) CHEMUNG (ex-Esso Annapolis, Sept. 9, 1939) CHIKASKIA (Oct. 2, 1943) CHIPOLA (1944) CHUKAWAN (1945) CIMARRON (Jan. 7, 1939)	ELOKOMIN (1945) GUADALUPE (ex-Esso Raleigh, Jan. 26, 1940) MANATEE (Feb. 19, 1944) MARIAS (1943) NANTAHALA PLATTE (July 8, 1939) SABINE (ex-Esso Albany, 1939) SALAMONIE (ex-Esso, Columbia, 1939) SEVERN (May 31, 1944) TALUGA (1943) TOLOVANA (1944)
Displacement : Dimensions : Guns : Machinery : Boilers : Radius : Cargo capacity : Complement :	7,256 tons (25,425 tons full load) 525 (w.l.), 553 (o.a.) × 75 × 31½ feet 1—5 inch, 4—3 inch (Chemung, Guadalupe, Kaskaskia, Sabine, Cimarron, Platte, Salamonie, 4—5 inch) 8—40 mm. AA. Geared turbines. 2 shafts. S.H.P. : 13,500 = 18.8 kts. 4 Foster-Wheeler (except Cimarron, 4 Babcock & Wilcox) Reported to be 18,000 miles Exceeds 6,000,000 gallons 64

Notes.—AO 22, 24-27, 30, 32, 51-58, 60-64, 97-100. Chikaskia and Marias assigned MSTs designated USS. War losses: Mississinewa, Neosho.

U.S.A.—Fleet Auxiliaries

Minesweeping Boats (MSB).  
54 Shallow Draught Type.



MSB 5. 1954, U.S. Navy, Official.							
MSB	MSB	MSB	MSB	MSB	MSB	MSB	MSB
1	8	15	22	29	36	43	49
2	9	16	23	30	37	44	50
3	10	17	24	31	38	45	51
4	11	18	25	32	39	46	52
5	12	19	26	33	40	47	53
6	13	20	27	34	41	48	54
7	14	21	28	35	42		
Displacement :			30 tons light (42 tons (max.))				
Dimensions :			57½ × 15½ × 4 feet				
Machinery :			Diesel engines. 2 shafts. Speed 10 kts.				
Complement :			6 to 8				

Notes.—New type. 48 wooden hull, 2 plastic. Highly specialised shallow draught minesweeping boats. Being built at various yards. MSB5 was the first to be launched. Will be carried in an MSB carrier, a large vessel still in the design stage, or in parent ships such as LSDs, fleet oilers and cargo ships to theatre operations. MSB 1-4 (ex-Army MLMs) built in 1946, others in 1951 and 1952. MSB 5 is the first vessel produced for the U.S. Navy to utilise gas turbine engines. The turbines are not used for the propulsion of the MSBs but to provide motive power for the boats' generators.

Petrol Carriers (AOG).  
1 "Ontonagon" Type.

AOG  
36 **ONTONAGON** (ex-Y 130) USNS  
Note.—TI-M-A2 type. Similar to Brazilian *Rijo* and *Raza*. Assigned to military Sea Transportation Service and designated U.S.N.S. (non-commissioned Naval vessel).

6 "Peconic" Class.

AOG		AOG	
78	<b>NODAWAY</b> (ex-Belridge)	80	<b>PISCATAQUA</b> (ex-Cisne) USNS
68	<b>PECONIC</b>	77	<b>RINCON</b>
79	<b>PETALUMA</b> (ex-Raccoon Bend)	76	<b>TONTI</b> USNS
Displacement :		2,060 tons light (6,000 tons full load)	
Dimensions :		325 (o.a.) × 48 × 19 (max.) feet	
Machinery :		Diesel. 1 shaft. B.H.P. : 1,400 = 10 kts.	
Capacity :		30,000 barrels	
Merchant crew :		33	

Notes.—TI-M-BT1 (Peconic) and TI-M-BT2 design. Assigned to MSTs and are non-commissioned naval vessels, USNS, unarmed. AOG 68 built by St. John's River Shipbuilding Co. Fla. 1945; AOG 76-80 by Todd, Galveston.

Petrol Carriers—continued.  
22 "Patapsco" Class.



PECATONICA.		1953, Skyfotos.	
AOG		AOG	
6	<b>AGAWAM</b> (May 6, 1943)	10	<b>NEMASKET</b> (Oct. 20, 1943)
49	<b>CHESTATEE</b>	55	<b>NESPELEN</b> (April 10, 1945)
50	<b>CHEWAUCAN</b> (July 22, 1944)	56	<b>NOXUBEE</b> (April 3, 1945)
7	<b>ELKHORN</b> (May 15, 1943)	1	<b>PATAPSCO</b> (Aug. 18, 1942)
8	<b>GENESSE</b> (Sep. 23, 1943)	57	<b>PECATONICA</b>
2	<b>KERN</b> (ex-Y 483) USNS	58	<b>PINNEBOG</b>
9	<b>KISHWAUKEE</b> (July 24, 1943)	5	<b>SUSQUEHANNA</b> (ex-Y 485) USNS
51	<b>MAQUOKETA</b> (Aug. 12, 1944)	3	<b>RIO GRANDE</b> (Sep. 23, 1942)
52	<b>MATTABESSET</b> (Nov. 11, 1944)	11	<b>TOMBIGEE</b> (Nov. 18, 1943)
53	<b>NAMAKAGON</b> (Nov. 4, 1944)	59	<b>WACISSA</b>
54	<b>NATCHAUG</b> (Dec. 6, 1944)	4	<b>WABASH</b> (ex-Y 484) USNS
Displacement :		1,850 tons (4,335 tons full load)	
Dimensions :		292 (w.l.), 310½ (o.a.) × 48½ × 15½ (max.) feet	
Guns :		4—3 inch d.p., 50 cal.	
Machinery :		Diesel-electric, 2 shafts. B.H.P. : 3,300 = 14 kts.	
Complement :		124	

Notes.—Launch dates above. Navy designed. 18 built at Savage, Minnesota ; 5 at Tacoma. Three of these ships are assigned to Military Sea Transportation Service designated USNS.

Distilling Ships.  
2 "Pasig" Class.



PASIG. Added 1949, U.S. Navy, Official.

ABATAN (ex-Mission San Lorenzo)		PASIG (ex-Mission San Xavier)	
Displacement		5,730 tons (22,390 tons full load)	
Dimensions :		504 (pp.), 523½ (o.a.) × 68 × 30½ (max.) feet	
Guns :		1—5 inch, 4—3 inch, 8—40 mm. AA.	
Machinery :		Turbo-electric, S.H.P. : 10,000 = 16½ kts.	
Boilers :		2 Babcock & Wilcox	
Capacity :		20,211 tons	

Notes.—Both launched 1944. Nos. AW 4 (ex-AO 92) and AW 3 (ex-AO 91), respectively. Maritime Commission T2-SE-A2 design. Fitted with a derrick for the hoisting of LCUs and landing craft to be loaded on the deck, see photo. Cranes are of 150 tons capacity. Both out of commission, in reserve.

Icebreakers.

New Construction.

AGB 4 GLACIER

Laid down :	1 Aug. 1953
Displacement :	8,220 tons (8,775 tons full load)
Dimensions :	310 × 74 × 20 feet
Aircraft :	2 Helicopters
Guns :	2—5 inch, 6—3 inch in enclosed mounts
Machinery :	Fairbanks Morse Diesel Engines and 2 Westinghouse electric propulsion motor units. H.P. : 21,000

Notes.—Designed and built by Ingall's Shipbuilding Corporation, Pascagoula, Mississippi. Ample stowage for fuel and provisions. Designed for breaking ice more than 20 feet thick, and her bow is to be heavily armoured to ram through obstructions instead of the slower method of driving the ship on top of the ice field and crushing it by sheer weight. Helicopters will be carried to spot the best course through the ice. Largest and highest powered icebreaker yet built. To have largest capacity single-armature D.C. motors ever built. To complete 1955.

4 "Wind" Type.



EDISTO. Added 1948, U.S. Navy, Official.

ATKA (ex-Southwind)  
BURTON ISLAND

EDISTO  
STATEN ISLAND (ex-Northwind)

Displacement:	3,500 tons (6,500 tons full load)
Dimensions :	250 (pp.), 269 (o.a.) × 63½ × 25½ feet
Guns :	1—5 inch, 38 cal., 4—40 mm. AA.
Machinery :	Diesel, with electric drive. 2 shafts. S.H.P. : 10,000 = 16 kts.

Notes.—Built by Western Pipe & Steel Co. (Atka and Staten Island) and San Pedro, N.Y. Entirely welded construction, with double hull. Forward shaft removed, armament reduced. Equipment includes helicopter aft. Atka served with Russian Navy. Staten Island (ex-Northwind) and Westwind, which had been on loan to Russia were recommissioned in U.S. Navy, 26 Jan. 1952. Westwind, AGB 6, was subsequently transferred to the U.S. Coast Guard.

No.	Ex-No.	Name	Launched	Completed
AGB 3	WAGB 280	Atka	7 Mar. 1943	15 July 1944
AGB 1	AG 88	Burton Island	30 Apr. 1946	28 Dec. 1946
AGB 2	AG 89	Edisto	29 May 1946	20 Mar. 1947
AGB 5	WAGB 278	Staten Island	28 Dec. 1942	15 Feb. 1944

## Minesweeper Depot Ship.

## New Construction.

1 Philadelphia Navy Yard  
**XMAP**

Displacement : 3,100 tons *light*  
Dimensions : 251 (o.a.) × 29 × 20 (max.) feet

Notes.—Officially described as Sweeper Device. The construction of XMAP 2 was cancelled Sep. 1950.

## Experimental Minefield Sweepers.

**YAG**

36 ex-FLOYD W. SPENCER  
37 ex-JOHN L. SULLIVAN  
38 ex-EDWARD KAVANAUGH

**YAG**

39 TRANSIT ABLE  
40 TRANSIT BAKER

(ex-Ira Nelson Morris)

Dimensions : 422½ (o.a.) × 57 × 34½ (max.) feet  
Machinery : Steam reciprocating. H.P. 2,500 - 11 kts.

Notes.—Liberty ships, EC 2-S-C1 type, built 1943-44, acquired by Navy in 1952-53. To be used as guinea-pig ships in sweeping minefields. Remote engine room controls on bridge.

## Netlayers (Boom Defence Vessels) (AN).

## 15 "Cohoes" Class.



WAXSAW.

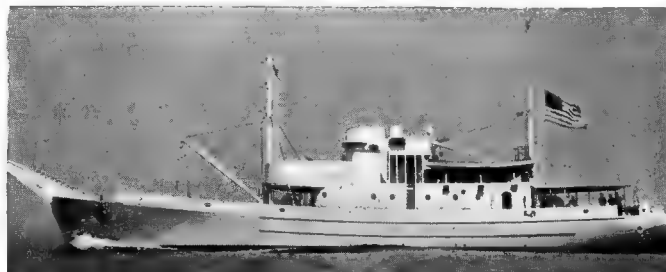
1949, U.S. Navy, Official.

**COHOES** (Nov. 29, 1944)  
**ETLAH** (Dec. 16, 1944)  
**MANAYUNK** (March 30, 1945)  
**MARIETTA** (April 27, 1945)  
**NAHANT** (June, 1945)  
**NAUBUC** (April 5, 1944)  
**ONEOTA** (May 27, 1944)  
**PASSACONAWAY** (June 30, 1944)

**OASSAIC** (June 29, 1944)  
**SHAKAMAXON** (Sept. 9, 1944)  
**SUNCOCK** (Feb. 16, 1945)  
**TONAWANDA** (Nov. 14, 1944)  
**TUNXIS** (Aug. 18, 1944)  
**WAXSAW** (Sept. 15, 1944)  
**YAZOO** (Oct. 18, 1944)

Displacement : 650 tons (785 tons *full load*)  
Dimensions : 168½ × 33½ × 10½ feet  
Guns : 1—3 inch  
Machinery : Diesel-electric. B.H.P. : 1,200 = 12 kts.  
Complement : 46

Notes.—AN 78-92. Built by Commercial Iron Works (78-83); Marine Iron & S.B. Co. (84-86); Leatham D. Smith S.B. Co. (87-89); and Zenith Dredge Co. (90-92).

Netlayers (Boom Defence Vessels)—continued.  
25 "Tree" Class.

BOXWOOD.

1941, U.S. Navy, Official

4 American S.B. Co., Cleveland  
**LOCUST** (Feb. 1, 1941)  
**MANGO** (Feb. 22, 1941)  
**MIMOSA** (March 15, 1941)  
**MULBERRY** (March 26, 1941)  
(AN 22, 24, 26, 27)

3 General Engrg. & D.D. Co  
**BUCKTHORN** (ex-Dogwood,  
March 27, 1941)

**EBONY** (June 3, 1941)  
**EUCALYPTUS** (July 3, 1941)  
(AN 14-16)

2 John H. Mathis Co.  
**TEABERRY** (May 24, 1941)  
**TEAK** (July 7, 1941)  
(AN 34, 35)

6 American S.B. Co., Lorain  
**HAZEL** (ex-Poplar, Feb. 14, 1941)  
**NUTMEG** (ex-Sycamore, March 13, 1941)  
**PALM** (Feb. 8, 1941)  
**REDWOOD** (Feb. 22, 1942)  
**ROSEWOOD** (April 1, 1941)  
**SANDALWOOD** (March 16, 1941)  
(AN 29, 33, 28, 30, 31, 32)

4 Lake Washington Shipyards

**ALOE** (Jan. 11, 1941)  
**ASH** (Feb. 15, 1941)  
**BOXWOOD** (ex-Birch, March 8, 1941)  
**BUTTERNUT** (May 10, 1941)  
(AN 6-9)

4 Commercial Iron Works  
**BUCKEYE** (ex-Cottonwood, July 26, 1941)  
**CATALPA** (Feb. 22, 1941)  
**CHESTNUT** (March 15, 1941)  
**CINCHONA** (July 2, 1941)  
(AN 13, 10-12)

2 Marietta Mfg. Co.

**ELDER** (ex-Juniper, June 19, 1941)  
**HOLLY** (April 17, 1941)  
(AN 20, 19)

Displacement : 560 tons (580 tons *full load*)  
Dimensions : 146 (w.l.), 163 (o.a.) × 30½ × 10½ (mean), 11½ (max.) feet  
Guns : 1—3 inch AA., some M.G.  
Machinery : Diesel-electric. B.H.P. : 800 = 13 kts.  
Complement : 48

Notes.—Former YN 1-30. Steel hulls. Three of this class were transferred to the French Navy in 1944, and one to Turkey in 1947.

## Depot Ships (APB).

## 16 "Ex-LST" Type.

**APB**  
49 **ACCOMAC** (ex-LST 710)  
35 **BENEWAH** (ex-APL 35)  
45 **BLACKFORD** (ex-AKS 16, ex-LST 1111)  
50 **CAMERON** (ex-LST 928)  
36 **COLLETON** (ex-APL 36)  
44 **DORCHESTER** (ex-AKS 17,  
ex-ST 1112)

**APB**  
38 **MARLBORO** (ex-APL 38)  
39 **MERCER** (ex-APL 39)  
40 **NUECES** (ex-APL 40)  
44 **PRESQUE ISLE** (ex-LST 678)  
48 **VANDEBURGH** (ex-AKS 19,  
ex-LST 1114)  
41 **WYTHE** (ex-LST 575)  
42 **YAVAPAI** (ex-LST 676)  
43 **YOLO** (ex-LST 677)

37 **ECHOLS** (ex-APL 37)  
47 **KINGMAN** (ex-AKS 18, ex-LST 1113)  
Displacement : 2,189 tons (light)  
Dimensions : 328 (o.a.) × 50 (extreme) × 11 feet  
Guns : 40 mm. (no. of guns varies)  
Speed : 12 kts. (APB 41-50), 10 kts. (APB 35-40)

Notes.—Officially rated as Barrack ships, self-propelled (APB). All ex-LST type ships of the same basic characteristics.

**APB**

51 **DUPAGE** (ex-S.S. John W. Weeks)

Notes.—Launched 2 Jan. 1943. Converted liberty-type merchant vessel. EC 2-S-C1 type.

## Submarine Rescue Vessels (ASR).

**PENGUIN** (ex-Chetco, July 20, 1943)

**SKYLARK** (ex-Yustaga, 1946)

Displacement : 1,235 tons (1,675 tons *full load*)  
Dimensions : 195 (w.l.), 205 (o.a.) × 38½ × 12 (mean), 15½ (max.) feet  
Guns : 1—3 inch, 2—40 mm. AA.  
Machinery : Diesel-electric. B.H.P. : 3,000 = 16.5 kts.  
Complement : 85

Notes.—Former fleet type tugs, adapted for present service in 1947. Built by Charleston S.B. & D.D. Co. ASR 12, 20. *Bluebird*, ASR 19, transferred to Turkey, May, 1950.



FLORIKAN.

1943, U.S. Navy, Official.

**CHANTICLEER** (June, 1942)  
**COUCAL** (June, 1942)  
**FLORIKAN** (June 14, 1942)  
**GREENLET** (July 12, 1942)

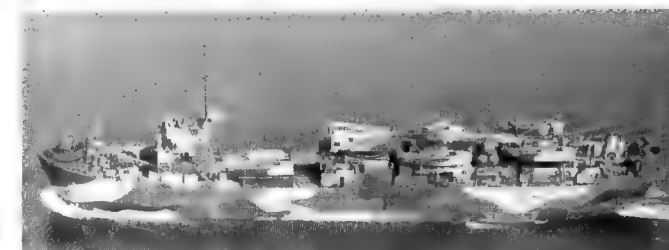
**KITTIWAKE** (July 10, 1945)  
**PETREL** (1945)  
**SUNBIRD** (1945)  
**TRINGA** (1945)

Displacement : 1,653 tons (2,141 tons *full load*)  
Dimensions : 251½ × 42 × 14½ feet  
Guns : 2—3 inch, 2—40 mm. AA.  
Machinery : Diesel-electric. B.H.P. : 3,000 = 14.9 kts.  
Complement : 85

Notes.—ASR 7-10, built by Moore D.D. Co. ; 13-16, built by Savannah Machine & Foundry Co. Large tug type.

General Notes.—All above vessels are equipped with powerful pumps, heavy air compressors and special submarine rescue chambers.

## Salvage Tenders (ARST).



PALMYRA.

1949, U.S. Navy, Official.

**LAYSAN ISLAND** (ex-LST 1098)

**PALMYRA** (ex-LST 1100)

Displacement : 1,653 tons (4,080 tons *full load*)  
Dimensions : 328 × 50 × 11 feet (14½ feet *max.*)  
Machinery : Diesel. 2 shafts. B.H.P. : 1,800 = 11 kts.

Notes.—ARST 1, 3. Tenders. Out of commission, in reserve.

## U.S.A.—Fleet Auxiliaries

### Salvage Vessels (ARS).



BOLSTER. 1946, U.S. Navy, Official.

**BOLSTER** (Dec. 23, 1944);  
**CHAIN** (June 3, 1943)  
**CLAMP** (ex-Arlantic Salvor, Oct. 24, 1942)  
**CONSERVER** (Jan. 27, 1945)  
**CURRENT** (Sept. 25, 1943)  
**DELIVER** (Sept. 25, 1943)  
**ESCAPE** (Nov. 22, 1942)  
**GRAPPLE** (Dec. 31, 1942)

**GRASP** (July 31, 1943)  
**HOIST** (March 31, 1945)  
**OPPORTUNE** (March 31, 1945)  
**PRESERVER** (April 1, 1943)  
**RECLAIMER** (June 25, 1945)  
**RECOVERY** (Aug. 4, 1945)  
**SAFEGUARD** (Nov. 20, 1943)  
**SNATCH** (April 8, 1944)

Displacement : 1,360 tons  
 Dimensions : 207 (w.l.), 213½ (o.a.) × 39 × 13 feet  
 Guns : 4—40 mm. AA.  
 Machinery : Diesel-electric. 2 shafts. B.H.P. : 3,000 = 14 kts.  
 Complements : 85

Notes.—ARS 38, 20, 33, 39, 22, 23, 6, 7, 24, 40, 41, 8, 42, 43, 25, 27. Built by Basalt Rock Co. Cable, ARS 19, Curb, ARS 21, and Gear, A RS 34, are on loan to private operators.

**VIKING** (ex-Guide, ex-Flamingo, 1918)

Displacement : 1,060 tons (1,400 tons full load)  
 Dimensions : 187½ (o.a.) × 36½ × 10½ feet  
 Guns : 2—3 inch, 50 cal. AA.  
 Machinery : Triple expansion. I.H.P. : 1,400 = 14 kts.  
 Boilers : 2 Babcock & Wilcox  
 Oil fuel : 275 tons  
 Complement : 79

Notes.—No. ARS 1 (ex-AM 32). Former "Bird" class minesweeper. Although Navy owned is operated by a commercial salvage company under contract to the Navy.

### Salvage Lifting Vessels (ARSD).

**GYPSY** (ex-LSM 549)  
**MENDER** (ex-LSM 550)

**SALVAGER** (ex-LSM 551)  
**WINDLASS** (ex-LSM 552)

Displacement : 740 tons (1,095 tons full load)  
 Dimensions : 224½ × 34 × 7 feet  
 Machinery : Diesel. 2 shafts. B.H.P. : 2,800 = 13 kts.

Notes.—ARSD 1-4. Used as diving tenders. All launched 7 Dec. 1945.

### Fleet X-Ray Ship.

**AG 141 WHIDBEY** (ex-FS 395)

Note.—Small cargo carrier, taken over from Army. Is now used as Fleet X-ray Examination Ship. Same type a "Camano" class AKL.

### Fleet Tugs.



MOLALA (later no funnel type). Added 1950 U.S. Navy, Official.



SIOUX (earlier funnel type). Added 1950, U.S. Navy, Official.

**ABNAKI** (April 22, 1943)  
**ACHOMAWI** (Sept. 10, 1944)  
**ALSEA** (May 22, 1943)  
**APACHE** (May 8, 1942)  
**ARAPAHO** (ex-Catawba, June 22, 1942)  
**ARIKARA** (June 22, 1943)  
**ATAKAPA** (July 11, 1944)  
**AVOYEL** (Aug. 9, 1944)  
**BANNOCK** (Jan. 17, 1943)  
**CAHUILLA** (Nov. 2, 1944)  
**CHICKASAW** (July 23, 1942)  
**CHILULA** (Dec. 1, 1944)  
**CHIMARIKO** (Dec. 30, 1944)  
**CHIPPewa** (July 25, 1942)  
**CHOCTAW** (Oct. 18, 1942)  
**CHOWANOC** (Aug. 20, 1943)  
**COCOPA** (Oct. 5, 1943)  
**CREE** (Jan. 5, 1943)  
**CUSABO** (Feb. 26, 1945)  
**HIDATSA** (Dec. 29, 1943)

**HITCHITI** (Jan. 29, 1944)  
**HOPI** (Sept. 7, 1942)  
**JICARILLA** (Feb. 25, 1944)  
**KIOWA** (Nov. 5, 1942)  
**LIPAN** (Sept. 17, 1942)  
**LUISENO** (March 17, 1945)  
**METACO** (Oct. 14, 1942)  
**MENOMINEE** (Feb. 14, 1942)  
**MOCTOBI** (March 25, 1944)  
**MOLALA** (Dec. 23, 1942)  
**MORENO** (July 9, 1942)  
**MOSOSPELEA** (Mar. 7, 1945)  
**MUNSEE** (Jan. 21, 1943)  
**NARRAGANSETT** (Aug. 8, 1942)  
**NIPMUC** (April 12, 1945)  
**PAIUTE** (June 4, 1945)  
**PAKANA** (March 3, 1943)  
**PAPAGO** (June 21, 1945)  
**PAWNEE** (March 31, 1942)  
**PINTO** (Jan. 5, 1943)  
**POTAWATOMI** (April 3, 1943)  
**QUAPAW** (May 15, 1943)

### Fleet Tugs—continued.

**SALINAN** (July 20, 1945)  
**SENECA** (Feb. 2, 1943)  
**SERRANO** (July 24, 1943)  
**SHAKORI** (Aug. 9, 1945)  
**SIOUX** (May 27, 1942)  
**TAKELMA** (Sept. 18, 1943)  
**TAWAKONI** (Oct. 28, 1943)

**TAWASA** (Feb. 22, 1943)  
**TEKESTA** (March 20, 1943)  
**TENINO** (Jan. 10, 1944)  
**TOLOWA** (May 17, 1944)  
**UTE** (June 24, 1942)  
**UTINA** (Aug. 31, 1945)  
**WENATCHEE** (Sept. 7, 1944)  
**YUMA** (July 17, 1943)

Displacement : 1,235 tons (1,675 tons full load)  
 Dimensions : 195 (w.l.), 205 (o.a.) × 38½ × 12 (mean), 15½ (max.) feet  
 Guns : 1—3 inch, 4—40 mm. AA., 2—20 mm. AA.; but some have had armament reduced.  
 Machinery : 4 sets Diesels with electric drive. B.H.P. : 3,000 = 16.5 kts.  
 Complement : 85

Notes.—Fitted with powerful pumps and other salvage equipment. (Some are fitted as wireless controlled target ships, including Chickasaw.) ATF 67-76, 81-88, 90-94, 96-98, 100-110, 112-116, 118, 148-163. Wateree (ATF 117) lost. Sarsi (ATF 111) sank after striking a mine off Korea, 27 Aug. 1952.

### Auxiliary Ocean Tugs.

**ACCOKEEK** (ATA 181)  
**ALGORMA** (ATA 212)  
**ALLEGHENY** (ATA 179)  
**BAGAADUCE** (ATA 194)  
**CAHOKIA** (ATA 186)  
**CATAWBA** (ATA 210)  
**CHALLENGE** (ATA 201)  
**GERONIMO** (ATA 207)  
**IUKA** (ATA 123)  
**KALMIA** (ATA 184)  
**KEOSANQUA** (ATA 198)  
**KEYWADIN** (ATA 213)  
**KOKA** (ATA 185)  
**MAHOPAC** (ATA 196)  
**NAVAJO** (ATA 211)  
**NAVIGATOR** (ATA 203)  
**NOTTOWAY** (ATA 183)  
**PENOBSCOT** (ATA 188)  
**PINOLA** (ATA 206)

**REINDEER** (ATA 189)  
**SAGAMORE** (ATA 208)  
**SALISH** (ATA 187)  
**SAMOSSET** (ATA 190)  
**SCIOTA** (ATA 205)  
**SONOOMA** (ATA 175)  
**SOTOYOMA** (ATA 121)  
**STALLION** (ATA 193)  
**SUNNADIN** (ATA 197)  
**TATNUCK** (ATA 195)  
**TILLAMOOK** (ATA 192)  
**TONKAWA** (ATA 176)  
**TUNICA** (ATA 178)  
**UMPUA** (ATA 209)  
**UNADILIA** (ATA 182)  
**UNDAUNTED** (ATA 199)  
**WAMPANOAG** (ATA 202)  
**WANDKANK** (ATA 204)  
**WATEREE** (ATA 174)

Displacement : 534 tons (835 tons full load)  
 Dimensions : 134½ (w.l.), 143 × 33½ × 13 feet  
 Guns : 1—3 inch d.p.  
 Machinery : Diesel-electric. B.H.P. : 1,500 = 13 kts.

Note.—Ex-ATRs (Ocean Rescue Tugs) which were reclassified. All launched 1943-1945.

### M.S.T.S. Auxiliary Ocean Tugs.

**T-ATA 240** (U.S.N.S.) ex-U.S. Army LT 455  
**241** (U.S.N.S.) ex-U.S. Army LT 60

**T-ATA 242** (U.S.N.S.) ex. U.S. Army LT 132  
**243** (U.S.S.) ex-Army LT 646  
**244** (U.S.N.S.) ex-U.S. Army LT 156

Displacement : 534 tons (835 tons full load)  
 Dimensions : 143 (o.a.) × 33½ × 13½ (max.) feet  
 Machinery : Diesel-electric. B.H.P. = 1,500 = 13 kts.

Notes.—Military Sea Transportation Service Ships. T-ATA 239 (ex-LT 532) was returned to U.S. Army.

### Large Harbour Tugs.

Note.—The U.S. Navy has 188 large harbour tugs listed under service craft and designated YTB. 100 to 135 feet in length.



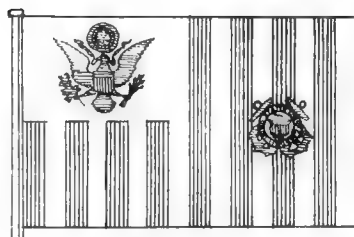
## Flags.

Colour Key

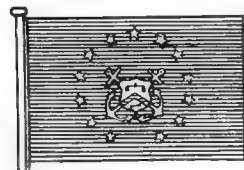
Red	IIII
White	I
Blue	III



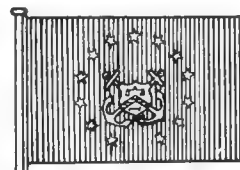
STANDARD



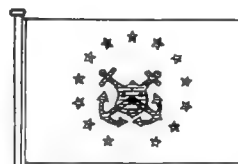
ENSIGN



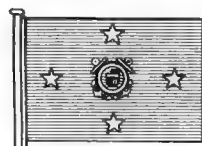
SECRETARY OF THE TREASURY



UNDER SECRETARY OF THE TREASURY



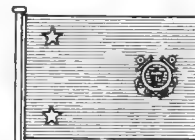
ASSISTANT SECRETARY OF THE TREASURY



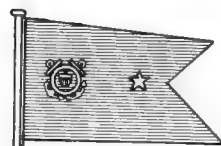
ADMIRAL



VICE-ADMIRAL



REAR-ADMIRAL



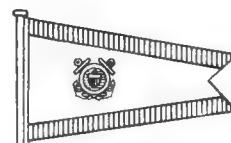
COMMODORE



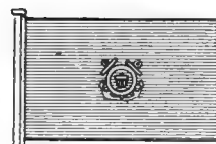
SUB-DIV.



BROAD COMMAND PENDANT



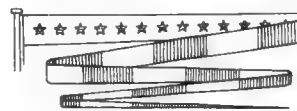
BURGEES COMMAND PENDANT



AUXILIARY



ANCHORAGE



PENDANT

## Administration.

Commandant, U.S.C.G. : Vice-Admiral Alfred C. Richmond.  
 Assistant Commandant : Rear-Admiral James A. Hirschfield.  
 Engineer-in-Chief : Rear-Admiral Kenneth K. Cowart.  
 Superintendent of U.S.C.G. Academy : Rear-Admiral A. G. Hall.

## Personnel.

35,000 officers and men.

## I.—ESTABLISHMENT.

The United States Coast Guard was established by the Act of Congress approved January 28, 1915, which consolidated the Revenue Cutter Service founded in 1790 and the Life Saving Service founded in 1878. The act of establishment as amended provides (Title 14, U.S. Code, Part 1, Sect. 1) "The Coast Guard as established January 28, 1915, shall be a military service and a branch of the armed forces of the United States at all times. The Coast Guard shall be a service in the Treasury Department, except when operating as a service in the Navy". The Lighthouse Service, founded in 1789, was transferred to the Coast Guard on July 1, 1939, as a result of the President's Reorganization Plan No. 11. On February 28, 1942, the President transferred temporarily from the Secretary of Commerce to the Commandant of the Coast Guard certain safety-at-sea functions of the former Bureau of Marine Inspection and Navigation. The President's Reorganization Plan 111, which became effective July 16, 1946, made this temporary transfer of functions permanent.

## II.—DUTIES.

1. The peacetime duties of the Coast Guard have as their principal objective safety and security at sea through enforcement of the navigation laws, saving life and assistance to vessels in distress, maintenance of aids to navigation, and marine inspection.

2. Law enforcement duties, performed for all departments of the government, include those relating to customs, movements and anchorage of vessels, immigration, quarantine, neutrality, navigation and other laws governing merchant vessels and motor boats, safety of life on navigable waters during regattas, oil pollution, sponge fisheries, protection of game, seal and fisheries in Alaska, protection of bird reservations established by Executive Order and suppression of mutinies.

3. Life saving and assistance duties include maintenance of coastal stations and communication lines on the continental coasts of the United States, conduct of the International Ice Patrol, icebreaking, weather patrol, derelict destruction, winter cruising on the Atlantic coast, extension of medical aid to fishing vessels, Bering Sea Patrol and flood relief work. In its humanitarian duties the Coast Guard renders aid and assistance to vessels and aircraft in distress irrespective of nationality and extends its protection, if needed, to all shipping within the scope of its operations.

4. The Coast Guard establishes and maintains navigation aids, consisting of lighthouses, lightships, radio beacons, buoys, radar beacons, loran, and unlighted beacons on the sea and lake coasts of the United States, on the rivers of the United States as authorized by law, and on the coasts of all other territory under United States jurisdiction, with the exception of Panama.

5. In time of national emergency or when the President so directs the Coast Guard operates as a part of the Navy. A military organization was adopted at the time the service was established in 1790, before the establishment of the Navy Department. This organization has been continued since that date for the purpose of maintaining the general efficiency of the operation of the service in its law enforcement duties in time of peace. The executive direction under which the Coast Guard operates as a part of the Navy in time of war is similar in effect to a measure of mobilization. In this respect the Coast Guard is a potential reserve force for the Navy. No personnel are normally assigned or equipped as land troops. Vessels are prepared in emergencies to equip landing forces with small arms and machine guns; stations are similarly prepared to undertake emergency police duties in a more limited sense, because of the smaller units involved, but in both cases these duties would be incidental to the primary purpose of the service, the enforcement of law on the high seas and navigable waters of the United States and the saving of life and property. Recently reactivated, in the present emergency, the Coast Guard Reserve has been assigned to man a number of port security units throughout the United States.

## III.—ORGANIZATION.

For the administration and operation of the Coast Guard, the United States, including its territories and insular possessions and the waters adjacent thereto are divided into 12 districts, each under the command of a district commander operating directly under the Commandant of the Coast Guard.

## IV.—PERSONNEL.

Uniforms of officers and men are similar to those of U.S. Navy, but commissioned officers wear a gold shield on the sleeve instead of a star, and cap device is a gold spread-eagle, the talons grasping a horizontal foul anchor. A silver shield is mounted on the eagle's breast. Enlisted men and women of the Coast Guard wear a shield on the lower right sleeve.

## V.—VESSELS.

Coast Guard vessels are designated Coast Guard cutters. Those of 110 feet tug type and below are detailed to the larger maritime ports to enforce Customs and Navigation laws and the regulation of the anchorage and movement of vessels.

## VI.—AVIATION.

Air Stations in commission number nine. Location : Salem, Mass. ; Brooklyn, N.Y. ; Miami, Fla. ; St. Petersburg, Fla. ; San Diego, California ; Port Angeles, Washington ; Elizabeth City, N.C. ; South San Francisco, California ; Traverse City, Michigan.

U.S.A.—Coast Guard Cutters

Patrol Gunboats (Frigate Type)

13 "Owasco" Class (WPG).

Rated as 255 ft. Cutters.



IROQUOIS.

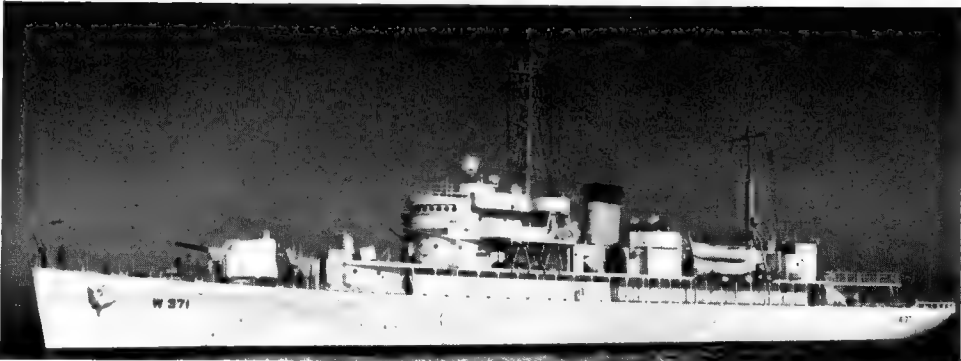
1952, U.S.C.G., Official.

WPG	WPG	WPG
68 ANDROSCOGGIN	66 KLAMATH	70 PONTCHARTRAIN (ex-Okeechobee)
41 CHATAUQUA	69 MENDOTA (Feb. 29, 1944)	42 SEBAGO (ex-Wachusett)
64 ESCANABA (ex-Otsego, Mar. 25, 1945)	67 MINNETONKA (ex-Sunapee)	44 WACHUSETT (ex-Huron, Nov. 5, 1944)
43 IROQUOIS	39 OWASCO	40 WINNEBAGO
		65 WINONA
Displacement:	1,563 tons (1,913 tons full load)	
Dimensions:	254 (o.a.) × 43 × 15 (mean), 16½ (max.) feet	
Guns:	1—5 inch, 38 cal., 4—40 mm., AA., 4—20 mm. AA.	
A S Weapons	1 Hedgehog, K-guns and racks for depth charges.	
Machinery:	Geared turbines with electric drive by Westinghouse Co.	
	S.H.P. : 4,000 = 18 kts.	

Notes.—Rated as 255 ft. Cutters. Anti-submarine weapons now re-installed. All built by Western Pipe & Steel Co., except *Mendota* and *Pontchartrain*, by the Coast Guard Shipyard. Cost over \$2,300,000 each without armament. All named after Indian tribes. *Owasco* decommissioned.

The 12 destroyer escorts of the "Edsall" class which had been on loan to the U.S. Coast Guard have been handed back to the U.S. Navy.

18 Navy Seaplane Tender Type (WAVP).



MACKINAC.

1954, U.S.C.G., Official.



HALF MOON.

1952, U.S.C.G., Official.

WAVP		WAVP	
370 CASCO (ex-AVP 12)		379 UNIMAK (ex-AVP 31)	
371 MACKINAC (ex-AVP 13)		380 YAKUTAT (ex-AVP 32)	
372 HUMBOLDT (ex-AVP 21)		381 BARATARIA (ex-AVP 33)	
373 MATAGORDA (ex-AVP 22)		382 BERING STRAIT (ex-AVP 34)	
374 ABSECON (ex-AVP 23)		383 CASTLE ROCK (ex-AVP 35)	
375 CHINCOTEAGUE (ex-AVP 24)		384 COOK INLET (ex-AVP 36)	
376 COOS BAY (ex-AVP 25)		385 DEXTER (ex-Biscayne, ex-AGC 18, ex-AVP 11)	
377 ROCKAWAY (ex-AVP 29)		386 McCULLOCH (ex-Wachapreague, ex-AGP 8, ex-AVP 56)	
378 HALF MOON (ex-AVP 26)		387 GRESHAM (ex-Willoughby, ex-AGP 9, ex-AVP 57)	
Displacement:		1,766 tons (2,800 tons full load)	
Dimensions:		310½ (o.a.) × 41 × 13½ (max.) feet	
Guns:		1—5 inch, 38 cal., 2 or 4—40 mm. AA., 4—20 mm. AA.	
Machinery:		Diesel. B.H.P.: 6,080 = 18.2 kts.	
Notes.—Rated as 311 ft. Cutters. All except last three AVPs on loan from U.S. Navy. Employed as weather ships. Dexter decommissioned.			
Name	Builders	Launched	Completed
Absecon	Lake Washington Shipyard	8 Mar., 1942	1942
Barataria	Lake Washington Shipyard	2 Oct., 1943	1944
Bering Strait	Lake Washington Shipyard	15 Jan., 1944	1944
Casco	Puget Sound Naval Shipyard	15 Nov. 1941	1942
Castle Rock	Lake Washington Shipyard	11 Mar., 1944	1944
Chincoteague	Lake Washington Shipyard	15 Apr., 1942	1942
Cook Inlet	Lake Washington Shipyard	13 May, 1944	1944
Coos Bay	Lake Washington Shipyard	15 May, 1942	1942
Dexter	Puget Sound Naval Shipyard	15 Nov. 1941	1941
Gresham	Lake Washington Shipyard	21 Aug. 1942	1944
Half Moon	Lake Washington Shipyard	12 July, 1942	1942
Humboldt	Boston Naval Shipyard	17 Mar. 1941	1941
McCulloch	Lake Washington Shipyard	10 July 1942	1944
Mackinac	Puget Sound Naval Shipyard	15 Nov. 1941	1942
Matagorda	Boston Naval Shipyard	18 Mar. 1941	1941
Rockaway	Associated Shipbuilders	14 Feb., 1942	1942
Unimak	Associated Shipbuilders	27 May, 1942	1942
Yakutat	Associated Shipbuilders	2 Jul., 1942	1942

## 6 "Campbell" Class (WPG)



DUANE.

1953, U.S.C.G., Official.



CAMPBELL.

1951, U.S.C.G., Official.

4 Philadelphia Navy Yard

WPG

32 CAMPBELL (ex-George W. Campbell)  
33 DUANE (ex-William J. Duane)

WPG

35 INGHAM (ex-Samuel D. Ingham)  
37 TANEY (ex-Roger B. Taney)  
(All launched June 3, 1936)

1 New York Navy Yard

WPG

36 SPENCER (ex-John C. Spencer,  
Jan. 6, 1937)

1 Charleston Navy Yard

31 BIBB (ex-George M. Bibb,  
Jan. 14, 1937)

Displacement: 2,216 tons standard  
 Dimensions: 308 (w.l.), 327 (o.a.) × 41 × 13 (mean 14½ (max.) feet  
 Guns: 1—5 inch, 38 cal., 2—40 mm., A.A., 4—20 mm. AA.  
 Machinery: Westinghouse geared turbines. 2 shafts, S.H.P.: 6,200 = 20.5 kts. (20 kts. sea speed)  
 Boilers: 2 Babcock & Wilcox  
 Oil fuel: 572 tons  
 Cruising radius: 8,000 miles at 12 kts., 12,300 miles at 11 kts.

Notes.—Rated as 327 ft. Cutters. Named after former Secretaries of the Treasury Campbell, which carried out 9,000 miles cruise to Great Britain and Europe in Summer 1951, has active war record: in 1943 she dispersed a pack of six German submarines in 12 hours, ramming and sinking one and depth-charging others. All this class originally mounted four 5-inch guns.



WPG 79 ONONDAGA

Added 1954, U.S.C.G., Official.

Displacement: 1,005 tons  
 Dimensions: 165 (o.a.) × 36 × 13½ feet  
 Guns: 2—3 inch, 50 cal., 6 M.G.  
 Machinery: Geared turbines. S.H.P.: 1,500 13 kts  
 Radius: 5,000 miles  
 Complement: 60

Notes.—Rated as 165 ft. Cutter. Steel. Strengthened for icebreaking. Built by Defoe Works, Bay City, 1934. Now decommissioned.



1951, U.S.C.G., Official.

WPG 154 TAMPA (ex-Sebec, ex-H.M.S. Banff, ex-Saranac)

Displacement: 1,546 tons  
 Dimensions: 250 (w.l.), 255 (o.a.) × 42 × 16 feet  
 Guns: 1—3 inch, 50 cal., 2—40 mm. AA., 4—20 mm. AA.  
 Machinery: Turbo-electric. H.P.: 3,220 = 16 kts.  
 Boilers: 2 Babcock & Wilcox  
 Oil fuel: 335 tons

Notes.—Launched 1930. Rated as 250 ft. Cutter. Designed for offshore cruising and patrol work, such as International Ice Patrol. Sole survivor of ten ships lent to Great Britain in 1941, few of which returned to U.S.C.G. service.

U.S.A.—Coast Guard Cutters, Icebreakers

Patrol Craft.  
14 "Argo" Class. (WPC).



AURORA. 1952, U.S.C.G., Official.

ARGO ARIADNE ATALANTA	AURORA CALYPSO CYANE	DAPHNE DIONE HERMES NEMESIS	NIKE PANDORA PERSEUS TRITON
Displacement:	334-337 tons		
Dimensions:	165 × 25½ × 9½ feet		
Guns:	1—3 inch, 23 cal., 2—1 pdr.		
Machinery:	Winton Diesels. 2 shafts. B.H.P.: 1,340 — 16 kts.		

Notes.—Rated as 165 ft. Cutters. Built of steel. All launched 1931-34. WPC 100, 101, 102, 103, 104, 105, 106, 107, 109, 111, 112, 113, 114, 116, respectively. Argo, Atalanta, Calypso, Cyane, Daphne and Hermes decommissioned.

22 "Active" Class. (WSC).



AGASSIZ. 1953, U.S.C.G., Official.

ACTIVE AGASSIZ ALERT BONHAM BOUTWELL	CAHOONE CARTIGAN COLFAX CRAWFORD CUYAHOGA	DILIGENCE EWING FREDERICK LEE GENERAL GREENE KIMBALL LEGARE	MARION MCLANE MORRIS TRAVIS VIGILANT YEATON
Displacement:	220 tons		
Dimensions:	125 (o.a.) × 23½ × 9 (max.) feet		
Guns:	1—40 mm. AA., 1—20 mm. AA.		
Machinery:	Diesel. 2 shafts. B.H.P.: 800 = 13 kts.		

Notes.—Rated as 125 ft. Cutters. Built of steel. All launched 1926-27. All re-engined in 1939-42. WSC 125, 126, 127, 129, 130, 131, 132, 133, 134, 137, 135, 137, 139, 140, 143, 144, 145, 146, 147, 153, 154, 156, respectively. Colfax, Crawford and Vigilant decommissioned. Cuyahoga assigned to Field Testing and Development Unit, located at the Coast Guard Yard, Baltimore, Maryland.

Patrol Boats (WPB).  
12 Steel Type.



WPB 95304.	1954, U.S.C.G., Official.
Displacement:	101.75 tons
Dimensions:	95 (o.a.) × 19 × 5 feet
Guns:	3—20 mm. AA. (1 twin mount, 1 single mount)
Machinery:	4 diesels. 2 shafts (2 engines in tandem each shaft. B.H.P.: 2,200 = 21 kts. (max.)
Radius:	1,500 miles cruising range
Complement:	15

Notes.—U.S. Coast Guard's newest type of cutter, rated as 95-foot patrol boat. Designed by Coast Guard engineers, built at the Coast Guard Yard, Curtis Bay, Maryland, for port security, search and rescue activities. Steel hulled, twin screws. Cutters of this type will in time replace the 83-foot wooden patrol boats (see below). First general duty craft built by the Coast Guard since the war. Combines all the latest developments in ship construction and navigation aids. Equipment includes radio direction finder and radar fathometer, gyro compass and loran receiver. Space for depth charges. Mechanical ventilation with individual thermostat heat control in each compartment, heat and sound insulation, fluorescent lighting. Fire resistant throughout. Cost \$475,000.

64 Wooden Type.



C.G. 83-527.	Added 1953, U.S.C.G., Official.
Displacement:	45 tons
Dimensions:	83 × 16 × 4½ feet
Guns:	20 mm. Oerlikons and D.C.
Machinery:	2 petrol engines. H.P.: 1,200 20.5 kts.
Complement:	10

Notes.—Rated as 83 ft. Cutters. 63 in service, 1 decommissioned. Launched 1938-42. Wood. Many were transferred to the Burmese, Cuban, Dominican, Equadorian, Mexican and Peruvian Navies. Many of the following also in service. Rated as Cutters (WYT), lengths 64, 63 and 56 feet; Rated as Pickets, lengths 38 and 40 feet. All have figure of length prefixed to official number on bows for ready recognition of type, e.g., CG 83-527 as in photo.

Icebreakers (WAGB).



1953, U.S.C.G., Official.

MACKINAW (ex-Manitowoc)	Builders: Toledo S.B. Co.
	Launched: 6 Mar., 1944.
	Completed: Jan., 1945.
Displacement:	5,090 tons
Dimensions:	290 (o.a.) × 75 × 19 (max.) feet
Guns:	M.G.
Machinery:	Diesel, with electric drive. 3 shafts. (1 forward, 2 aft). B.H.P.: 10,000 = 16 kts.
Radius:	6,000 miles at cruising speed

Notes.—WAGB 83. Cost over \$10,000,000. Of similar type to "Wind" class in next column. Constructed with 1½ in. plating for service as icebreaker on Great Lakes.

3 "Wind" Class.



EASTWIND. 1953, U.S.C.G., Official.

EASTWIND	NORTHWIND	WESTWIND
Displacement:	3,500 tons (6,500 tons full load)	
Dimensions:	250 (pp.), 269 (o.a.) × 63½ × 25½ feet	
Guns:	2—5 inch, 38 cal., 4—40 mm. AA.	
Machinery:	Diesel, with electric drive. 3 shafts (1 forward, 2 aft). B.H.P.: 13,300 = 16 kts.	

Notes.—Twin 5-inch turret forward and helicopter platform aft. Construction entirely welded, with double hull and exceptionally heavy plating, designed to crush 9 ft. ice. Northwind (first ship of that name), Southwind and Westwind were lent to Russian Navy in 1945. Southwind returned 1950 (see earlier page, U.S. Navy section), other two December 1951. Eastwind severely damaged in collision Jan. 19, 1949, recommissioned May 17, 1950, after repairs at Newport News.

No.	Name	Builders	Launched
WAGB 279	Eastwind	Western Pipe & Steel Co.	6 Feb., 1943
WAGB 282	Northwind		25 Feb., 1945
WAGB 281	Westwind		31 Mar. 1943

## Radioships.

## "Courier" Type (WAGR).



COURIER.

1952, U.S.C.G., Official.

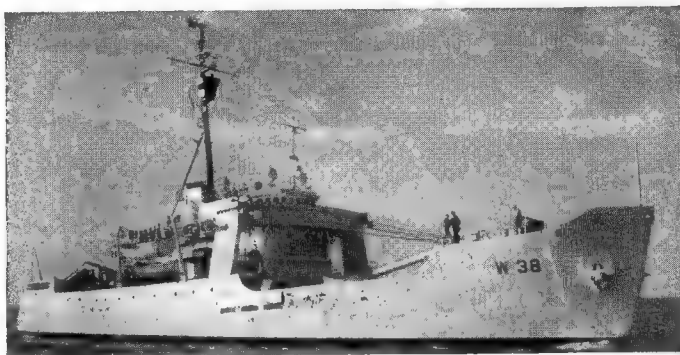
WAGR  
410 COURIER

Displacement : 5,800 tons  
 Dimensions :  $338\frac{1}{2} \times 50\frac{1}{2} \times 21$  (max.) feet  
 Machinery : Diesel, direct drive. B.H.P. : 1,600 = 10 kts.

Notes.—*Courier* (ex-Coastal Messenger), CI-M-AVI type, is the first of six WAGR (radio ships) to be manned by the Coast Guard for the State Department as relay stations for the Voice of America. She was built in 1945 as the U.S.S. *Doddridge* (AK 176) but was not used by the Navy. Of the same characteristics as the *Kukui*, the *Courier* is of 5,926 tons deadweight with a cruising range of approximately 14,500 miles. Length : 338 feet. Launched : 1945. For duty in foreign waters. Virtually a seagoing radio broadcasting station. Transmitting equipment is most powerful of its kind ever installed in any vessel. Commissioned 15 Feb. 1952 (Ex-Maritime Commission).

## Tender.

## (Miscellaneous Auxiliary, WAG).



STORIS.

1952, U.S.C.G., Official.

## STORIS (ex-Eskimo)

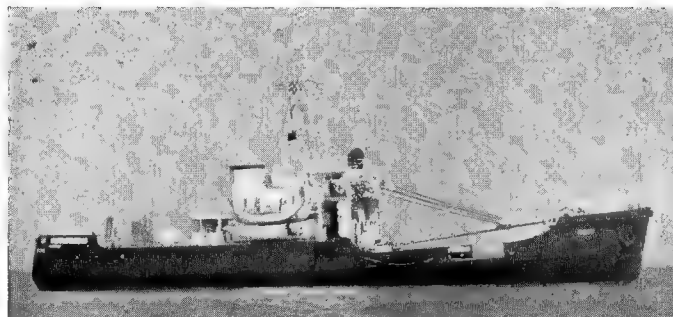
Builders: Toledo S.B. Co.  
 Launched: 1942.

Displacement : 1,715 tons  
 Dimensions :  $230$  (o.a.)  $\times 43 \times 14$  (mean), 15 (max.) feet  
 Machinery : Diesel, with electric drive. B.H.P. : 1,800 = 13.5 kts.

Notes.—WAG 38. Strengthened for ice navigation, and employed on Alaskan service. Search, rescue and law enforcement are primary duties. Makes supply runs to isolated Coast-guard installations within her patrol area.

## Buoy Tenders (WAGL).

## 38 "Cactus" and "Iris" Classes.



BLACKHAWK.

1952, U.S.C.G., Official.

20 *Marine Iron & S.B. Co., Duluth*  
**BASSWOOD**  
**BLACKHAWK** (June 18, 1943)  
**BLACKTHORN** (July 20, 1943)  
**BUTTONWOOD** (Nov. 28, 1942)  
**CACTUS** (Nov. 25, 1941)  
**CITRUS** (Aug. 15, 1942)  
**CLOVER** (1942)  
**CONIFER** (Oct. 3, 1942)  
**COWSLIP** (1942)  
**EVERGREEN**  
**HORNBEAM** (Aug. 15, 1943)  
**MESQUITE** (Nov. 14, 1942)  
**PAPAW**  
**PLANETREE**  
**SASSAFRAS** (1943)  
**SEDGE** (1943)  
**SPAR** (Nov. 2, 1943)  
**SUNDEW** (Feb. 8, 1944)  
**SWEETBRIAR** (Dec. 30, 1943)  
**SWEETGUM** (1943)

Displacement : 935 tons  
 Dimensions :  $180$  (o.a.)  $\times 37 \times 12$  (mean), 14 (max.) feet  
 Machinery : Diesel, with electric drive. B.H.P. : 1,200 = 14 kts.  
 (except *Citrus*, *Clover*, *Conifer*, *Cowslip*, *Evergreen*, *Tupelo*, *Woodbine*, which are B.H.P. : 1,000 = 13 kts.)

Notes.—Builders and launch dates above. *Redbud* lent to Military Sea Transportation Service as AKL (Cargo Ship Light).

**WHITE ALDER**  
**WHITE BUSH**  
**WHITE HEATH**

Displacement : 435 tons  
 Dimensions :  $133$  (o.a.)  $\times 30 \times 10$  (max.) feet  
 Machinery : Diesel-electric. B.H.P. : 300 = 10 kts.

Note.—All launched 1943.

## ASTER

Displacement : 500 tons (full load)  
 Dimensions :  $105$  (o.a.)  $\times 30\frac{1}{2} \times 8$  (max.) feet  
 Machinery : Diesel-electric

Notes.—Both launched 1943. Wood.

**BARBERRY** (Nov. 14, 1942)  
**BLUEBELL**  
**BRIER**

Displacement : 178 tons  
 Dimensions :  $100 \times 24 \times 4\frac{1}{2}$  feet  
 Machinery : Diesel, with electric drive. B.H.P. : 300 = 8.5 kts.

Note.—Launch dates above.

**WHITE HOLLY**  
**WHITE LUPINE**  
**WHITE PINE**

Displacement : 435 tons  
 Dimensions :  $133$  (o.a.)  $\times 30 \times 10$  (max.) feet  
 Machinery : Diesel-electric. B.H.P. : 300 = 10 kts.

## THISTLE

Displacement : 500 tons (full load)  
 Dimensions :  $105$  (o.a.)  $\times 30\frac{1}{2} \times 8$  (max.) feet  
 Machinery : Diesel-electric

**COSMOS** (Nov. 11, 1942)  
**PRIMROSE**  
**RAMBLER**

Displacement : 178 tons  
 Dimensions :  $100 \times 24 \times 4\frac{1}{2}$  feet  
 Machinery : Diesel, with electric drive. B.H.P. : 300 = 8.5 kts.

17 *Zenith Dredge Co., Duluth*  
**ACACIA** (ex-*Thistle*, April 7, 1944)  
**BALSAM** (1942)  
**BITTERSWEET** (1943)  
**BRAMBLE** (1943)  
**FIREBUSH** (1943)  
**GENTIAN** (1942)  
**IRIS** (March 10, 1944)  
**LAUREL** (Aug. 4, 1942)  
**MADRONA** (Nov. 11, 1942)  
**MALLOW** (1943)  
**MARIPOSA** (Jan. 7, 1944)  
**SAGEBRUSH** (Sept. 30, 1943)  
**SALVIA** (Sept. 15, 1943)  
**SORREL** (Sept. 28, 1942)  
**TUPELO** (Nov. 28, 1942)  
**WOODBINE**  
**WOODRUSH** (1944)

1 *Coast Guard Shipyard, Curtis Bay*  
**IRONWOOD** (March, 1943)

## Buoy Tenders—continued.



HEATHER.

Added 1954, U.S.C.G., Official.

**HEATHER** (ex-*Obstructor*)  
**IVY** (ex-*Barbican*)

Displacement : 1,054 tons (1,250 tons full load)  
 Dimensions :  $188\frac{1}{2}$  (o.a.)  $\times 37 \times 12$  (max.) feet  
 Machinery : Triple expansion. 2 shafts. I.H.P. : 1,200 = 12 kts.

**JONQUIL** (ex-*Bastian*)  
**MAGNOLIA** (ex-*Barricade*)

Displacement : 1,054 tons (1,250 tons full load)  
 Dimensions :  $188\frac{1}{2}$  (o.a.)  $\times 37 \times 12$  (max.) feet  
 Machinery : Triple expansion. 2 shafts. I.H.P. : 1,200 = 12 kts.

Notes.—Ex-Army mineplanters ACM 7, 5, 6, 3, 8, launched 1942. WAGL 331, 329, 330, 328, 332, respectively.

## JUNIPER

Launched: 18 May, 1940.

Displacement : 794 tons  
 Dimensions :  $177 \times 32\frac{1}{2} \times 9\frac{1}{2}$  feet  
 Machinery : Diesel, with electric drive. 2 shafts. B.H.P. : 900 = 13 kts.

## MAPLE

Displacement : 342 tons (Maple, 350 tons)  
 Dimensions :  $122 \times 27 \times 6\frac{1}{2}$  feet  
 Machinery : Diesel. 2 shafts. B.H.P. : 400 = 10 kts.

## NARCISSUS

Displacement : 342 tons (Maple, 350 tons)  
 Dimensions :  $122 \times 27 \times 6\frac{1}{2}$  feet  
 Machinery : Diesel. 2 shafts. B.H.P. : 400 = 10 kts.

## ZINNIA

Note.—All launched 1939.

## MISTLETOE

Launched: 1939.

Displacement : 1,040 tons  
 Dimensions :  $173 \times 34 \times 11$  feet  
 Machinery : Reciprocating. 2 shafts. I.H.P. : 1,000 = 12 kts.

## FIR (1939)

Displacement : 885 tons  
 Dimensions :  $175 \times 32 \times 11$  feet  
 Machinery : Reciprocating. 2 shafts. I.H.P. : 1,000 = 12 kts.

## HOLLYHOCK (1937)

Displacement : 885 tons  
 Dimensions :  $175 \times 32 \times 11$  feet  
 Machinery : Reciprocating. 2 shafts. I.H.P. : 1,000 = 12 kts.

## WALNUT (1939)

Notes.—Walnut being converted and re-engined by Willamette Iron & Steel Co., Portland Oregon.

## HEMLOCK

Launched: 1934.

Displacement : 1,005 tons  
 Dimensions :  $175 \times 32 \times 12\frac{1}{2}$  feet  
 Machinery : Reciprocating. 2 shafts. I.H.P. : 1,000 = 12 kts.

## TAMARACK

Launched: 1934.

Displacement : 400 tons  
 Dimensions :  $124 \times 29 \times 7\frac{1}{2}$  feet  
 Machinery : Diesel, with electric drive. B.H.P. : 600 = 10 kts.



## U.S.A—Coast Guard Buoy Tenders, Tugs, etc.

### Buoy Tenders—continued.

#### ARBUTUS

Launched: 1934.

Displacement: 960 tons  
Dimensions: 175 × 32 × 12½ feet  
Machinery: Reciprocating, 2 shafts. I.H.P.: 1,000 = 11 kts.

#### HICKORY

Launched: 1933.

Displacement: 400 tons  
Dimensions: 131½ × 24½ × 9½ feet  
Machinery: Reciprocating, I.H.P.: 500 = 12 kts

#### LILAC

Launched: 1933.

Displacement: 770 tons  
Dimensions: 172 × 32 × 8½ feet  
Machinery: Reciprocating, 2 shafts. I.H.P.: 1,000 = 11.5 kts.

#### COLUMBINE (1931)

#### LINDEN (1931)

#### WISTARIA (1933)

Displacement: 323 tons  
Dimensions: 121½ × 25 × 6½ feet  
Machinery: Diesel, with electric drive. B.H.P.: 240 = 9 kts.

Note.—Launch dates above.

#### VIOLET

Launched: 1930.

Displacement: 1,012 tons  
Dimensions: 173½ × 32 × 10½ feet  
Machinery: Reciprocating, 2 shafts. I.H.P.: 1,000 = 12 kts.

#### HAWTHORN

#### OAK

Displacement: 875 tons  
Dimensions: 160 × 30 × 9½ feet  
Machinery: Reciprocating, I.H.P.: 750 = 8 kts.

Note.—Both launched 1931.

#### CEDAR

Launched: 1917.

Displacement: 1,370 tons  
Dimensions: 201 × 36 × 14 feet  
Machinery: Reciprocating, I.H.P.: 1,300 = 12 kts.

Note.—Out of commission in reserve.

Smaller buoy tenders include the following:

CLEMATIS (1944), } 93 tons  
SHADBUSH (1944), }  
BLACKROCK (1942), 160 tons  
BIRCH (1939), 76 tons  
JASMINE (1939), }  
BLUEBONNET (1935), } 184 tons  
ELM (1937), 69 tons  
RHODODENDRON (1935), 140 tons

DAHLIA (1933), 160 tons  
CHERRY (1932), 202 tons  
MYRTLE (1932), 186 tons  
ALTHEA (1930), }  
POINCIANA (1930), } 120 tons  
BEECH (1928), 255 tons  
PALMETTO (1916), 170 tons

River service buoy tenders comprise the following:

#### WAKEROBIN (1927)

Displacement: 575 tons  
Dimensions: 182 × 43 × 4 feet  
Machinery: I.H.P.: 550 = 6 kts

Note.—Wakerobin is on loan to U.S. Army Engineers.

FOXGLOVE (1944) }  
SUMAC (1944) } 350 tons  
FERN (6 Nov. 1942) }  
LANTANA (1943) 273 tons  
OLEANDER (1940) 80 tons

DOGWOOD (1942) }  
FORSYTHIA (1940) } 230 tons  
SYCAMORE (1940) }  
GOLDEN ROD (1938) }  
POPLAR (1939) } 193 tons

### Lightships.

Notes.—Total 41. Five decommissioned, 36 active: 27 on Station assignments and nine relief lightships. Overall length: 97 to 149 feet.

### Cable Layer (WARC).



1954, U.S.C.G., Official.

#### YAMACRAW

Displacement: 1,054 tons (1,250 tons full load)  
Dimensions: 188½ (o.a.) × 37 × 12 (max.) feet  
Machinery: Triple expansion, 2 shafts. I.H.P.: 1,200 = 11 kts.

Notes.—WARC 333. Ex-Army minelayer. Launched: 1943.

### Supply Ships (WAK).

#### KUKUI (ex-U.S.S. Colquitt, AK 174)

Launched: 1944

Displacement: 4,900 tons (5,800 tons gross)  
Dimensions: 338½ (o.a.) × 50 × 21 (max.) feet  
Machinery: Nordberg diesel. B.H.P.: 1,700 = 12 kts.

Notes.—WAK 186 Built: 1945 by Froemming Bros. Milwaukee, Wisc. Maritime Administration type CI-M-AVI. Appearance very similar to that of Radioship Courier.

#### NETTLE (ex-FS 396)

Displacement: 728 tons  
Dimensions: 176½ (o.a.) × 32 × 10 (max.) feet  
Machinery: Diesel. B.H.P.: 1,000 = 13 kts.

Notes.—Ex-Army craft. WAK 169, 170. Both launched 1944. Trillium decommissioned.

#### TRILLIUM (ex-FS 397)

### Training Ship.

#### (Auxiliary Barque) WIX.

#### EAGLE (ex-Horst Wessel)

Builders: Blohm & Voss, Hamburg.  
Launched: 13 June, 1936.

Displacement: 1,634 tons (1,800 tons full load)  
Dimensions: 265½ (pp.), 295½ (o.a.) × 39½ × 15½ (mean), 17 (max.) feet  
Sail area: 21,350 sq. ft.  
Height of masts: 150 feet  
Speed: As high as 18 kts. under full sail alone  
Machinery: 2 M.A.N. auxiliary Diesels. B.H.P.: 700 = 10 kts.  
Oil fuel: 48 tons

Notes.—Former German training ship for naval cadets. Taken by the United States as a reparation after the war for employment in U.S. Coast Guard Practice Squadron. Has made four cruises to European waters to train C.G. cadets. Sister ship, *Albert Leo Schlageter*, also fell into American hands, but was sold to Brazil.

### Oceangoing Tugs (WAT).



ACUSHNET.

1948, Official.

#### ACUSHNET (ex-Shackle)

Displacement: 1,557 tons  
Dimensions: 207 (w.l.), 213½ (o.a.) × 39 × 13 (mean), 15½ (max.) feet  
Machinery: Diesel-electric, 2 shafts. H.P.: 3,000 = 14 kts.

Note.—WAT 167, 168. Launched 1 Apr. 1943, 8 Apr. 1944, respectively.

#### CHEROKEE

#### TAMAROA

Displacement: 1,170 tons  
Dimensions: 195 (w.l.), 205½ (o.a.) × 38½ × 12 (mean), 16 (max.) feet  
Guns: 1—3 inch, 50 cal., 2—20 mm. AA.  
Machinery: Diesel-electric. H.P.: 3,000 = 16 kts.

Note.—WAT 165 and WAT 166, launched 10 Nov. 1939 and 13 July 1943.

### Harbour Tugs (WYT).

#### YONAGUSKA

Launched: 1944  
Displacement: 332 tons  
Dimensions: 100 (o.a.) × 27 × 8½ (mean), 11½ (max.) feet  
Machinery: Diesel Electric. S.H.P.: 1,000 = 10 kts.

Notes.—Transferred from U.S. Navy. Former U.S.S. *Yonaguska*, YTb 195. Now WYT 195.

ARUNDEL (June 24, 1939)  
MAHONING (July 22, 1939)  
NAUGATUCK (March 23, 1939)  
RARITAN (March 23, 1939)  
KAW (1942)  
MANITOU (Sept. 29, 1942)  
CHINOOK (July, 1943)

MOHICAN (July, 1943)  
OJIBWAY (Aug. 10, 1943)  
SAUK (Aug. 10, 1943)  
SHONOMISH (Aug. 10, 1943)  
APALACHEE (1943)  
YANKTON (1943)

Displacement: 328 tons  
Dimensions: 110 (o.a.) × 26½ × 10½ (mean), 12½ (max.) feet  
Machinery: Diesel-electric. S.H.P.: 1,000 = 12 kts.

Notes.—First pair built by Gulfport Works, Port Arthur, Texas; second pair by Defoe Works, Bay City, Mich.; third pair by Coast Guard Yard, Curtis Bay, Md.; remaining 7 by Ira S. Bushey & Son, Brooklyn, N.Y. Launch dates above. Strengthened for icebreaking.

3 Charleston Navy Yard  
CALUMET  
NAVESINK  
TUCKAHOE

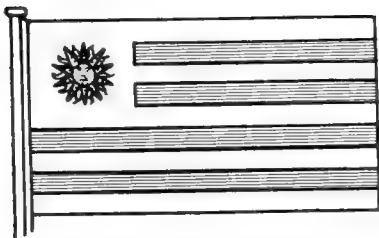
1 Portsmouth Navy Yard  
HUDSON

Displacement: 290 tons  
Dimensions: 110½ × 24 × 10½ (mean), 11½ (max.) feet  
Machinery: Diesel, with electric drive. B.H.P.: 800 = 12 kts.

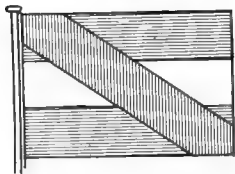
Notes.—Strengthened for icebreaking. All launched 1934. Builders above.

# URUGUAY.

## Flags.



ENSIGN AND MERCANTILE



JACK



PRESIDENT

## Administration.

Minister of Defence : Señor Escribano Don Ledo Arroyo Torres.  
Inspector General of the Navy : Rear-Admiral Alfredo Aguiar.  
Naval Attaché in London : Captain Santiago Turcio.

## Frigates.



ARTIGAS.

1953, Official.

### ARTIGAS (ex-U.S.S. Bronstein, DE 189)

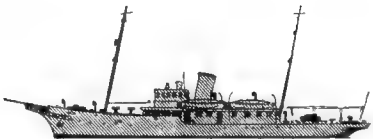
Displacement : 1,240 tons (1,900 tons full load)  
Dimensions : 306 (o.a.) × 36½ × 12 (max.) feet  
Guns : 3—3 inch, 2—40 mm., 4—20 mm.  
Machinery : Diesel-electric. 2 shafts. B.H.P. : 6,000 = 21 kts

### URUGUAY (ex-U.S.S. Baron, DE 166)

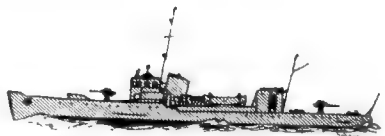
Notes.—Former United States destroyer escorts of the "Bostwick" class, transferred to Uruguay in 1951. Uruguay has no mainmast

Pendant No.	Name	Builders	Launched	Completed
DE 2	Artigas	Federal S.B. & D.D. Co., Port Newark	14 Nov. 1943	13 Dec. 1943
DE 1	Uruguay		9 May 1943	5 July 1943

## Silhouettes.



CAPITAN MIRANDA.



PAYSANDU Class.

## Personnel.

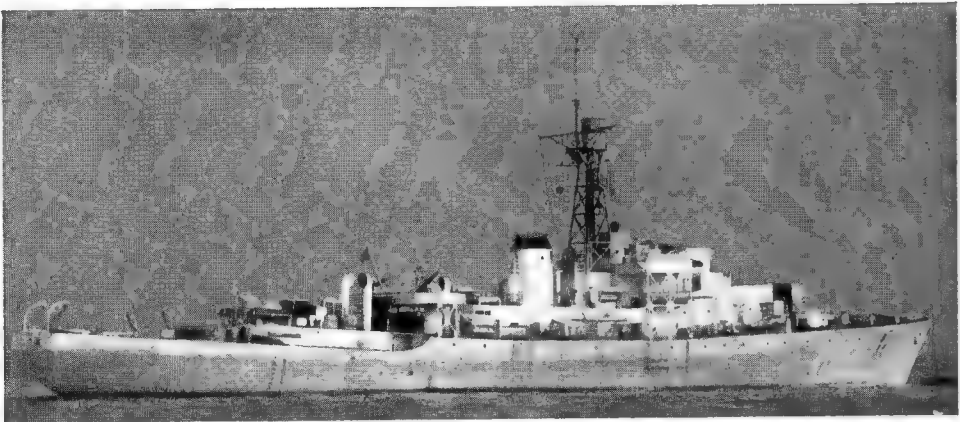
1,470 officers and ratings.

## Mercantile Marine.

Lloyd's Register appendix, 1954 : 48 vessels of 64,902 tons gross.

## Frigate (Training Ship)

(Buque Escuela)



Added 1953

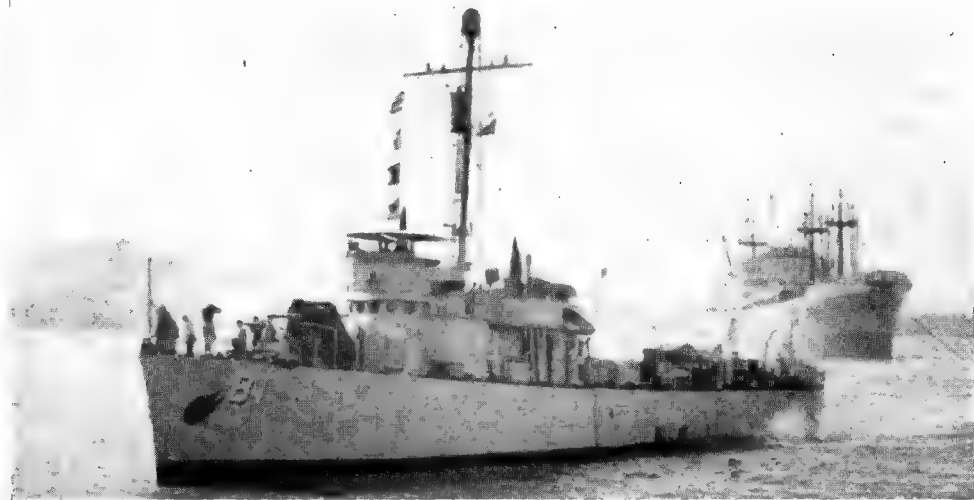
### MONTEVIDEO (ex-H.M.C.S. Arnprior, ex-H.M.S. Rising Castle)

Builders : Harland & Wolff, Ltd., Belfast  
Laid down : 21 June 1943  
Launched : 8 Feb. 1944  
Completed : 26 June 1944  
Displacement : 1,010 tons standard (1,600 tons full load)  
Dimensions : 251½ × 36½ × 17½ (max.) feet  
Machinery : Triple expansion. 190 r.p.m. I.H.P. : 2,750 = 17 kts.  
Boilers : 2 water tube, oil fired

Notes.—Former British and Canadian "Castle" class corvette (frigate).

URUGUAY—Patrol Vessels, Survey Ships, etc.

Patrol Vessels.



MALDONADO. **MALDONADO** (ex-PC 1234) 1953, Official.

Launched : 3 Apr., 1943  
Displacement : 280 tons  
Dimensions : 165 (w.l.), 173½ (o.a.) × 23 × 6½ feet  
Guns : 2—3 inch d.p., 4 M.G. and D.C.  
Machinery : 2 sets G.M. 2-stroke Diesels. 2 shafts. B.H.P. : 3,750 = 22 kts.  
Complement : 80

Notes.—Former submarine chaser. Built New York. Transferred from U.S. Navy in 1944. Pendant No. B 1.

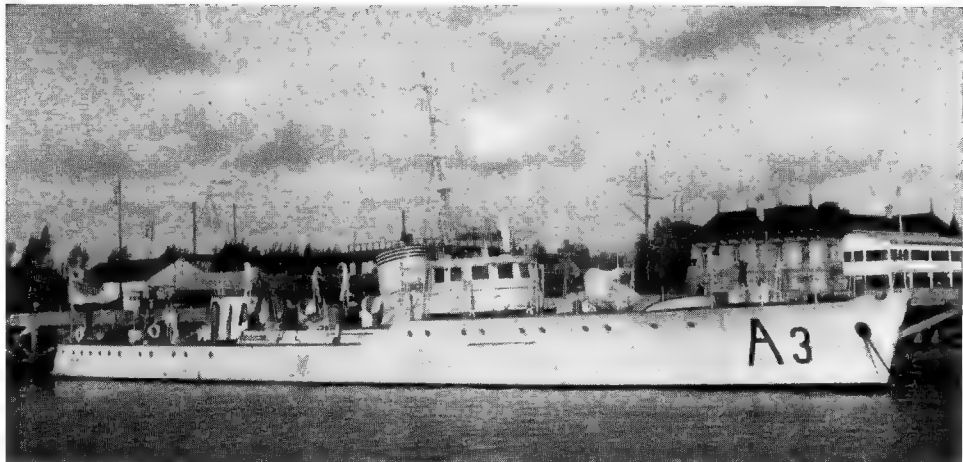
Surveying Vessel



CAPITAN MIRANDA

Builders : S.E. de C.N., Matagorda, Cadiz  
Launched : 1930  
Displacement : 516 tons  
Dimensions : 148 (pp), 167 (o.a.) × 28 × 10 feet  
Machinery : 1 M.A.N. Diesel. B.H.P. : 500 = 10.5 kts.  
Oil fuel : 45 tons  
Complement : 52

Patrol Vessels—continued.  
3 “ Paysandu ” Class.



RIO NEGRO. 1939, Official.

**PAYSANDU** **RIO NEGRO** **SALTO**

Displacement : 180 tons standard  
Dimensions : 137½ × 19 × 5½ feet  
Guns : 2—3 inch, 2—47 mm. AA. 2 M.G.  
Machinery : 2 sets Germania Diesels. B.H.P. : 1,000 = 17 kts.  
Oil fuel : 18 tons  
Radius : 4,000 miles at 10 kts.  
Complement : 51

Note.—Employed as training ships.

Pendant No.	Name	Builders	Launched
A 1	Paysandu	Cantieri Navali Riuniti, Ancona	21 Jul., 1935
A 3	Rio Negro		22 Aug., 1935
A 2	Salto		11 Aug., 1935

Rescue Motor Launch (Lancha de Rescate)



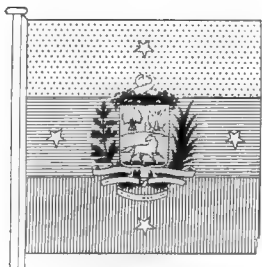
AR 1. 1953, Official.

AR 1 (4 July 1944)

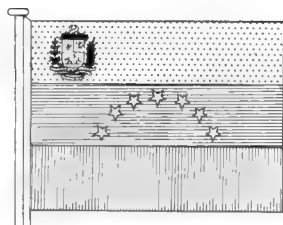
Speed : 33 kts.

# VENEZUELA.

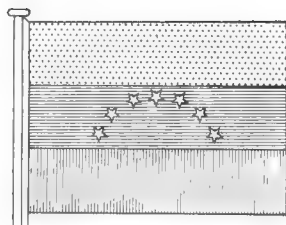
## Flags.



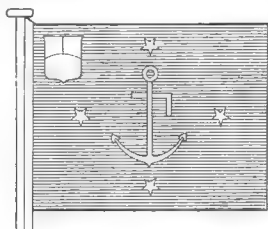
PRESIDENT'S STANDARD



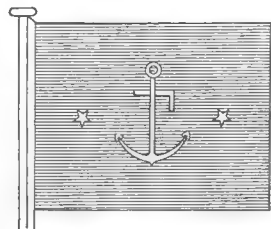
NATIONAL ENSIGN



MERCHANT FLAG



MINISTER OF DEFENCE



COMMANDER OF NAVAL FORCES

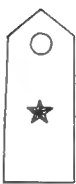
## Uniforms.



Almirante  
ADMIRAL



Vice-Almirante  
VICE-ADMIRAL



Contralmirante  
REAR-ADMIRAL



Capitán de Navío  
CAPTAIN



Capitán de Fragata  
COMMANDER



Capitán de Corbeta  
LIEUT-COMDR.



Tte. de Navío  
LIEUTENANT



Tte. de Fragata  
LIEUTENANT (JG)



Alferez de Navío  
ENSIGN

## Administration.

Minister of Defence : Colonel Marcos Perez Jimenez.  
Commandant of Venezulean Naval Forces : Captain Oscar Ghersey Gomez.  
Chief of Naval Staff : Commander Marco T. Montero L.

## Naval Base.

A naval base is projected. To be built at Turiamo.

## Personnel.

200 officers and 2,000 men. Includes two battalions of Marines. Duration of service in the Navy is two years.

## Mercantile Marine.

Lloyd's Register appendix, 1954 : 103 vessels of 187,613 tons gross.

## Destroyers.



1952, Venezuelan Navy, Official.

### ARAGUA

Displacement : 2,600 tons (3,300 tons full load)  
Dimensions : 402 (o.a.) × 42 × 12½ (max.) feet  
Guns : 6—4.5 inch (twin), 8—40 mm. (twin)  
Tubes : 3—21 inch  
A/S Weapons : 2 D.C.T., 2 D.C. racks  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 50,000 = 34.5 kts.  
Complement : 18 officers, 236 men

Notes.—Under construction by Vickers-Armstrongs, Barrow-in-Furness. *Aragua* laid down 29 June 1953.



NUEVA ESPARTA.

1954, Marconi's Wireless Telegraph Co., Ltd.

### NUEVA ESPARTA

### ZULIA

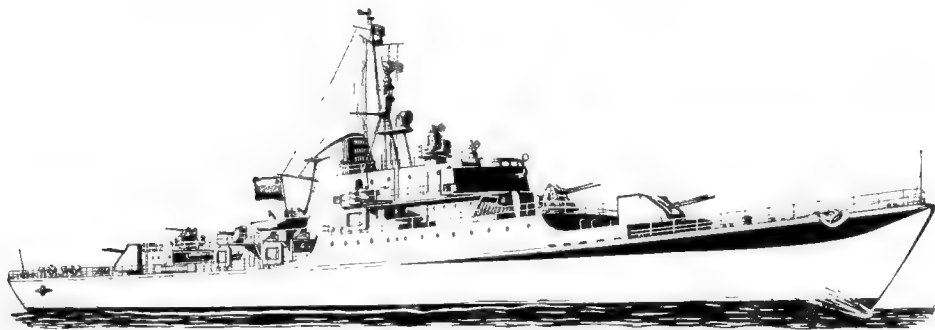
Displacement : 2,180 tons standard (2,700 tons full load)  
Dimensions : 378 (o.a.) × 40½ × 11½ (max.) feet  
Guns : 4—4.5 inch (twin), 10—40 mm. (twin)  
Tubes : 3—21 inch  
A/S Weapons : 2 depth charge tracks, 2 depth charge racks  
Machinery : Parsons geared turbines. 2 shafts. S.H.P. : 40,000 = 34 kts.  
Complement : 18 officers, 201 men

Notes.—Built by Vickers-Armstrongs, Barrow-in-Furness. Ordered 1950. Both laid down 24 July 1951. *Nueva Esparta* launched 19 Nov 1952 and completed end of 1953. *Zulia* launched 29 June 1953. Cost of two ships £5,000,000.

VENEZUELA—Frigates, Landing Ship, Patrol Boats.

Fast Anti-Submarine Frigates (Light Destroyer Escorts)

9 Ansaldo Type.



1954, Official.

Displacement: 1,150 tons for trials (1,300 tons full load)  
Dimensions: 320½ (o.a.) × 35½ × 8½ (trials) feet  
Guns: 4—4 inch (102 mm.) AA. in two twin turrets, 4—40 mm. AA., 8—20 mm. AA.  
Tubes: 3—21 inch  
A/S Weapons: 2 Hedgehogs or 3 squids, 4 D.C.T.  
Machinery: Geared turbines, 2 shafts, S.H.P.: 24,000 = 32 kts. (contract speed)  
Range: Radius of action: 2,800 miles at 18 kts., 4,000 miles at 15 kts.

Notes.—Orders were placed with Ansaldo, S.A., Leghorn Shipyard, Italy, for three light destroyers for completion in 1956. If satisfactory a repeat order was to be placed, but this has already been done. A further three vessels of the same type are reported to have been ordered.

Frigates (Corvettes).



VICTORIA.

CONSTITUCION (Dec. 17 1940)

Displacement:  
Dimensions:  
Guns:  
Machinery:  
Boilers:  
Complement:

FEDERACION

1,060 tons (1,350 tons full load)  
205 (o.a.) × 33 × 14 feet  
1—4 inch (102 mm.), 1—3 inch (75 mm.), 2—20 mm. AA.  
Triple expansion. I.H.P.: 2,750 = 17 kts.  
2 Scotch type  
70

PATRIA (1941)

1953, Venezuelan Navy, Official.

VICTORIA (1941)

Notes.—Former Canadian "Howar" type corvettes *Algoma*, *Amherst*, *Oakville* and *Wetaskiwin*. Launch dates above. *Ciribabo* lost on passage from Canada. *Libertad* ran aground off western Venezuela, 12 April, 1949 and discarded. *Independencia* stricken 1953.

Landing Ship.



1952, Venezuelan Navy, Official.

CAPANA (ex-LST 907)

Builders: Bethlehem, Higham, Mass.  
Launched: 18 Mar. 1944  
Displacement: 1,625 tons (4,080 tons full load)  
Dimensions: 328 (o.a.) × 50 × 14 (max.) feet  
Guns: 2—3 inch (75 mm.) d.p., 20—20 mm. AA.  
Machinery: 2 G.M. Diesels. 2 shafts. B.H.P.: 1,700 = 12 kts.  
Complement: 129

Notes.—Purchased in U.S.A. 1947. Recently employed as sea-going training ship for cadets.

Patrol Launches.

4 U.S. Type.



1952, Venezuelan Navy, Official.

ANTONIO DIAZ (CS 1)  
ARISMENDI (CS 4)

Displacement: 47 tons  
Dimensions: 83 × 16 × 4 feet  
Guns: 1—20 mm., 4 D.C.T.  
Machinery: 2 petrol engines. 2 shafts. B.H.P.: 1,200 = 15 kts.  
Complement: 10

BRICEÑO MÉNDEZ (CS 3)  
BRION (CS 2)

Notes.—All launched 1937. Ex-U.S. Coast Guard cutters 56193, 56194, 56195, 56196, respectively. Acquired 1944. Wood.

Coast Guard Vessels.

Notes.—12 Coast Guard motor boats were ordered from the French Navy shipbuilding yard at Cannes in 1954.



## Survey Launches.



1952, Venezuelan Navy, Official.

**CARIBE.**  
**TORBES**  
Displacement : 40 tons standard  
Dimensions : 101 x 21 x 10 feet  
Machinery : 2 Cleveland, 8-cylinder, 1,200 r.p.m. Diesels. 2 shafts.  
B.H.P. : 1,000 = 14 kts.  
Complement : 23

Notes.—Survey Vessels and Buoy Tenders. Wooden hulls. Torbes launched 27 Feb. 1950.

## Repair Launch.



1952, Venezuelan Navy, Official.

Displacement : 40 tons  
Dimensions : 50 x 8 x 6 feet  
Machinery : 2 Superior Diesels, B.H.P. 250  
Complement : 8

## Fleet Tug.



1952, Venezuelan Navy, Official.

**FELIPE LARRA ABAL** (ex-U.S.S. *Discoverer*, U.S.C.G. Auk, AM 39)  
Displacement : 704 tons (1,239 tons full load)  
Dimensions : 172 x 32 x 17 feet  
Machinery : 2 Compound steam triple expansion  
I.H.P. : 1,200 = 12 kts.  
Boilers : 2 water tube. Working pressure 180 lb./sq. in.  
Complement : 40

Note.—Built by Todd, N.Y. 1918-19.

## Tugs.



1952, Venezuelan Navy, Official.

**FERNANDO GOME** (ex-U.S.S. *Dudley*, YTM 744)  
Displacement : 161 tons  
Dimensions : 80 x 19 x 8 feet  
Machinery : Clark Diesel, 6-cylinder, 315 r.p.m. B.H.P. : 380 = 15 kts.  
Complement : 10



1952, Venezuelan Navy, Official.

**ESTEBAN ROJAS.**  
**ESTEBAN ROJAS** (ex-U.S. Army ST 46)  
Displacement : 164 and 160 tons  
Dimensions : 74 x 20 x 8 feet  
Machinery : Atlas Imperial Diesel. B.H.P. : 400 and 650 = 9 kts.  
Complement : 12

**DIANA** (ex-U.S. Army ST 873)



1952, Venezuelan Navy Official.

**CARACAS**  
Displacement : 480 tons  
Dimensions : 110 x 26 x 13 feet  
Machinery : 1 Compound steam triple expansion engine  
Boilers : 1 Water tube, working pressure 180 lb./sq. in.  
Complement : 19

## VIET NAM.

A Viet Nam Navy was created in 1952, but until recently it had no ships except some LCV and LCVP attached to assault groups. Young naval officers are trained at the French Ecole Navale at Brest. By the end of 1955 the Vietnamin Navy should include the following vessels :—

### Frigate.

#### 1 "Aventure" Class.

**LA CONFIANCE** (ex-French *Tor k'nais*, ex-British *Moya'a*)  
(see French section, page 206)

### Escort Vessel.

#### 1 "Annamite" Class.

**CHAMOIS** (ex-French *Annamite*)  
(see French section, page 208)

### Patrol Vessels.

#### 7 Ex-U.S. PC Type.

(for particulars see page 214)

### Coastal Minesweepers.

#### 3 Ex-U.S. YMS Type.

**BACH DANG** (ex-Belledune, ex-D 318, ex-YMS 78)  
**CHUONG DONG** (ex-Digitale, ex-D 326, ex-YMS 83)  
**HAM TU** (ex-Aubépine, ex-D 315, ex-YMS 28)  
(for particulars see page 214)

Notes.—Transferred from French Navy 11 Feb. 1954. Viet Nam names are those of three naval victories won during the thirteenth century by the Indo-Chinese Navy of that time against Chinese invading force.

### Landing Ships.

#### 2 Ex-U.S. LSM Type.

**LSM 9051** (ex-U.S.S. 85) **LSM 9052** (ex-U.S.S. 471)  
(see French section, page 218)

### Landing Craft.

#### 1 LCI or LCT Type.

(see page 218)

### LCM Type.

(see page 218)

Notes.—All fitted as gunboats and small transports.

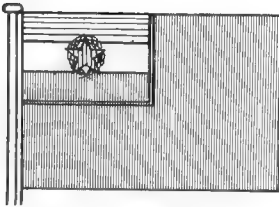
### Patrol Launches.

#### 8 VP (ex-HDML Type).

(for data, see French section, page 217)

YUGOSLAVIA

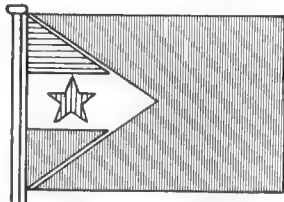
Flags.



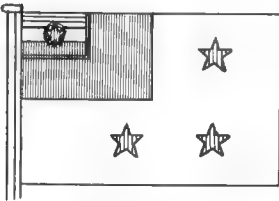
ENSIGN



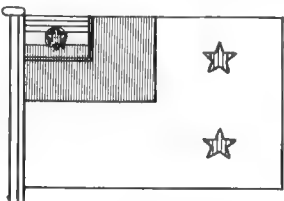
JACK



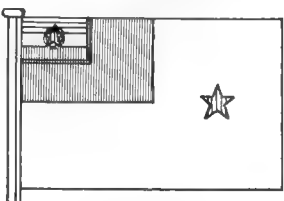
SHIPS OF THE  
NATIONAL DEFENCE



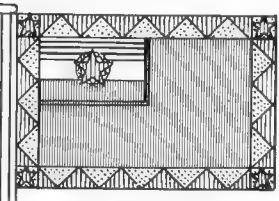
COMMANDER-IN-CHIEF  
OF THE NAVY



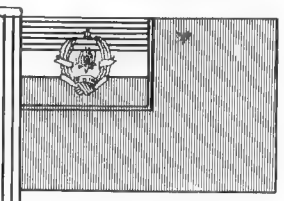
SQUADRON  
COMMANDER



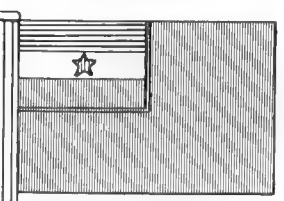
FLOTILLA  
COMMANDER



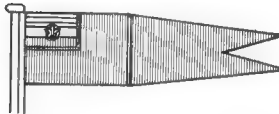
SUPREME COMMANDER  
ARMED FORCES



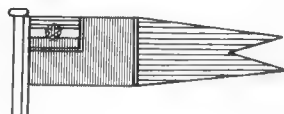
HONOUR FLAG



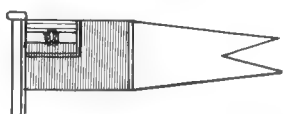
AUXILIARY SHIPS



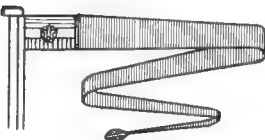
DIVISION  
COMMANDER



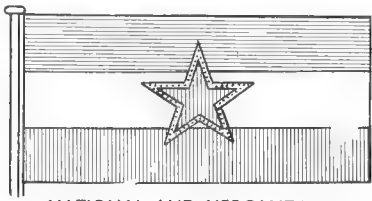
SUB-DIVISION  
COMMANDER



SENIOR OFFICER



PENDANT



NATIONAL AND MERCANTILE.

- Red
- White
- Blue
- Yellow

Uniforms.



Admiral.	Vice-Admiral.	Kontra-admiral.	Kapetan bojnogbroda	Kapetan fregate	Kapetan korvete	Poručnik bojnogbroda	Poručnik fregate	Poručnik korvete	Potporučnik
British Equivalent		Rear Admiral.	Captain over 3 years	Captain under 3 years	Commander.	Lt.-Commr.	Lieutenant	Sub.-Lieut.	Acting Sub.-Lieut.

Line officers only have golden stars above the stripes. Other branches have their respective insignia instead of stars. Black between the stripes.

Administration.

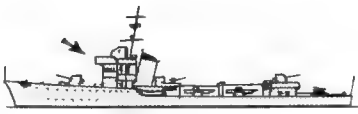
Commander-in-Chief: Vice-Admiral M. Jerkovitch  
Naval, Military and Air Attaché, London: Lieut.-General Bogdan Oreščanin

Personnel.

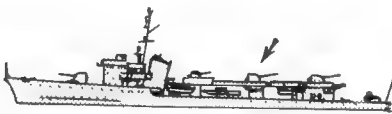
6,300 officers and men. Reserve: 1,100 officers and men.

Silhouettes.

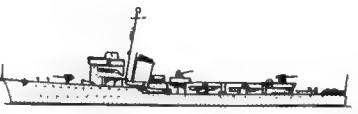
Scale: 150 feet = 1 inch.



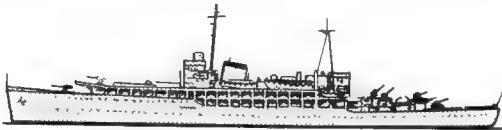
DURMITOR.



TRIGLAV, BOKOVO.



UČKA.



GALEB.

Mercantile Marine.

Lloyd's register appendix, 1954: 127 vessels of 248,582 tons gross.

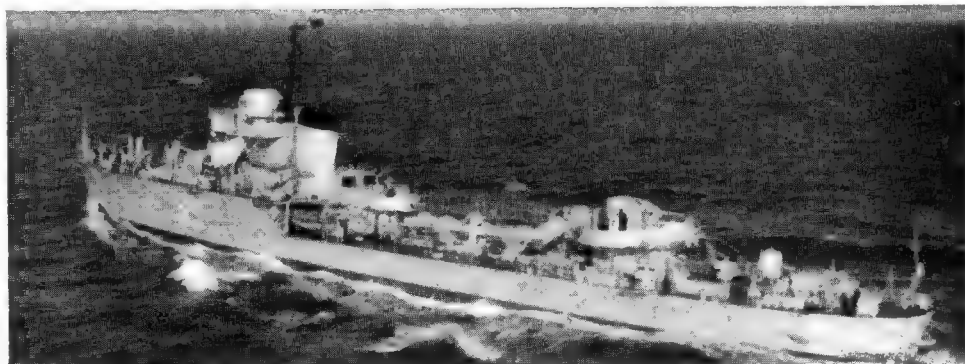
## Destroyers.

### SPLIT

Launched	1940
Displacement :	1,875 tons (2,400 tons full)
Dimensions :	316½ × 36½ × 12½ feet
Guns :	5—5.5 inch, 10—40 mm. AA.
Tubes :	6—21.7 inch (tripled)
Mines :	40
Machinery :	Turbines. 2 shafts.
Speed :	37 kts.
Oil fuel :	590 tons

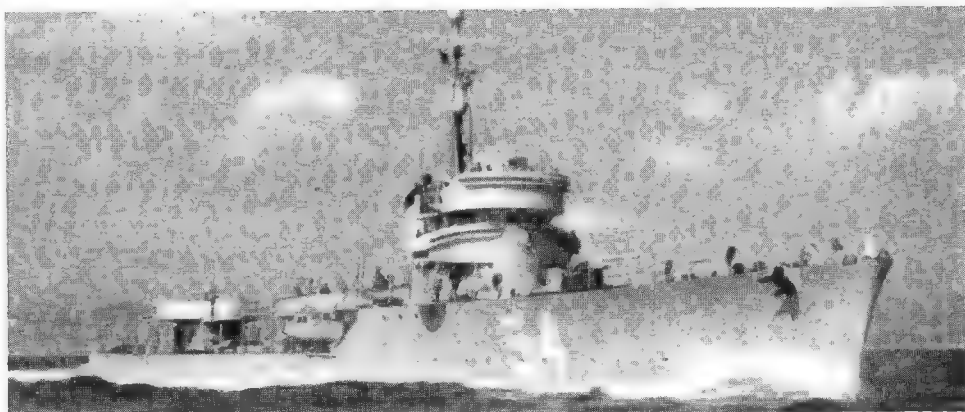
Notes.—Laid down by Chantières de Loire, Nantes, 1939, at Split Shipyard. Not yet complete. Two others of "Beograd" type reported building.

## 4 Ex-Italian Type.



DURMITOR.

1954, Official



UČKA.

1954, Official

<b>53 DURMITOR</b> (ex-Ariete, Ansaldo, March 6, 1943)	<b>54 UČKA</b> (ex-Balestra)
Displacement:	797 tons (about 1,000 tons full load)
Dimensions:	265½ × 27½ × 9 feet
Guns:	2—3.9 inch (100 mm., 47 cal.) AA., 10—20 mm., 70 cal., AA.
Tubes:	6—18 inch (tripled)
Machinery:	2 sets Tosi geared turbines. 2 shafts. S.H.P.: 22,000 = 31.5 kts.
Boilers:	2, of 3-drum type
Oil fuel:	200 tons

Notes.—Durmitor is the only survivor of her class. Laid down 15 July 1942, and completed 5 Aug. 1943. She is in service but not fully equipped with armament. Učka is also in service but not fully equipped with armament. She is not quite of same type as Durmitor, being larger. New name Učka means the Monte Maggiore near Abbazia. Učka laid down 5 Sept., 1942, and Flonda, laid down 26 Aug., 1942, were damaged on slip by bombs 20 Feb., 1945, rebuilt and completed by Yugoslavians.

## Destroyers—continued.



TRIGLAV.

1954, Official.

<b>52 BIOKOVO</b> (ex-Aliseo, C.N.M. Castellammare, Sept. 20, 1942)	<b>51 TRIGLAV</b> (ex-Indomito, C.T. Riva, Trigoso, July 6, 1943)
Displacement:	1,095-1,204 tons standard (1,649-1,709 tons full load)
Dimensions:	270½ (pp.), 293 (o.a.) × 32½ × 9½ feet
Guns:	3—3.9 inch, 47 cal., d.p., 11—20 mm. AA. (Biovovo: 2—3.9 inch, 10—20 mm. AA.) 4 D.C.T
Tubes:	4—18 inch
Machinery:	2 sets Tosi geared turbines. 2 shafts. S.H.P.: 15,500-16,000 = 25-26 kts.
Boilers:	2, of 3-drum type
Oil fuel:	430 tons
Complement:	175

Notes.—Ex-Italian. Builders and launch dates above.

## Submarines (Podmornice).

### 1 Ex-Italian Type

#### SAVA (ex-Tritone)

Builders:	C.R.D.A. Monfalcone
Laid down:	12 May 1941,
Launched:	3 Jan. 1942,
Completed:	10 Oct. 1942
Displacement:	747 tons standard, (905 tons surface, 1,068 tons submerged)
Dimensions:	207½ × 22½ × 16 feet
Tubes:	6—21 inch
Machinery:	H.P.: 2,400 = 16 kts. (surface), 8 kts. (submerged)
Radius:	12,000 miles at 8.5 kts.

Notes.—Former Italian. Sunk 17 Jan. 1943. Salvaged.

### 1 British Design.



Added 1952, Lieut. H. E. Jenkins, R.N.V.R.

#### TARA (ex-Nebojsa)

Builders:	Armstrong.
Launched:	1927
Displacement:	975 tons surface; 1,164 tons, submerged.
Dimensions:	236½ × 24 × 13 feet
Guns:	2—4 inch AA., 1 M.G.
Tubes:	6—21 inch (4 bow 2 stern).
Machinery:	B.H.P.: 2,400 = 15 kts. surface; H.P.: 1,600 = 10 kts. submerged
Radius:	5,000 miles at 9 kts.
Complement:	45

Notes.—Design is a modification of the British "L" type, materials having been assembled originally for L68, never built.

## YUGOSLAVIA—Torpedo Boats, etc.

### Torpedo Boats (*Torpiljarke*). 2 Ex-Austrian Type.



GOLESNICA.

**91 GOLESNICA** (ex-T 1, ex-T 76)

Displacement :  
Dimensions :  
Guns :  
Tubes :  
Machinery :  
Boilers :  
Fuel :  
Complement :

**92 CER** (ex-T 5, ex-T 87)  
262 and 266 tons, respectively  
188½ × 18½ × 5 feet  
2—66 mm. 1 M.G.  
4—18 inch (paired)  
Turbines. 2 shafts. S.H.P. : 5,000 = 20 kts.  
2 Yarrow  
18 to 20 tons coal, 24 to 34 tons oil.

1954, Official.

Notes.—Both launched in 1913. Built by Stab, Tecnico, Trieste, and Granz-Danubius Co., Porto T, Piùme respectively. T 1 similar in appearance to Sborul in Roumanian section. T 5 similar to T 8.

### Motor Torpedo Boats (*Torpedni Čamci*).

Note.—Total number of MTB's is 48. Under future programmes it is planned to raise this to 108 by 1958. 5 building, 55 to be built in next three years.

37 Type 108. New Construction.



MTB 119.

1954, Official.

### 8 American Type

**MT 1** (ex-PT 201)  
**MT 2** (ex-PT 204)

**MT 3** (ex-PT 207)  
**MT 4** (ex-PT 208)

Displacement :  
Dimensions :  
Guns :  
Tubes :  
Machinery :  
Complement :

56 tons full load  
78 × 20½ × 5½ feet  
1—40 mm. AA.  
4  
3 Packard motors, 3 shafts. H.P. : 4,500 = 35 kts.  
17

Notes.—Built by Higgins. All launched 1912. Transferred from U.S. Navy in 1945

**391** (ex-Durmitor)

**392** (ex-Kaimakalan)

Displacement :  
Dimensions :  
Guns :  
Tubes :  
Machinery :  
Complement :

60 tons  
92 × 14 × 5 feet  
1—47 mm. AA., 1 M.G. AA.  
2—18 inch  
4 Mercedes-Benz petrol motors. H.P. : 3,000 = 34 kts.  
14

Note.—Built by Lürssen, Vegesack, 1936-37.

## Patrol Vessel.



Added 1951, Lieut. Aldo Fraccaroli.

**JADRANKA** (ex-Bjeli Orao)

Builders :  
Launched :

C. R. dell' Adriatico, San Marco, Trieste  
3 Jun., 1939

Displacement : 567 tons standard (660 tons full load)  
Dimensions : 197 (pp.), 213½ (o.a.) × 26½ × 9½ feet  
Guns : 2—40 mm. AA., 2 M.G.  
Machinery : 2 Sulzer Diesels. B.H.P. : 1,900 = 18 kts.

Notes.—Was used as Royal yacht. Now used as Admiralty yacht and yacht of Marshal Tito. While in Italian hands was named *Alba* for some days only, then *Zagabria*.

## Training Ships (*Skolski Brodovi*).



1954, Marius Bar.

**M 11 GALEB** (ex-Ramb 111)

Launched : 1938

Displacement : 5,182 tons  
Measurement : 3,667 tons gross  
Dimensions : 385 × 51 × 18 feet  
Guns : 4—3.5 inch, 4—40 mm., 24—20 mm. (quadruple)  
Machinery : Diesel motors. 2 shafts  
Speed : 17 kts.

Notes.—Formerly Italian. Refloated and completed summer 1952. Now serving as a training ship. Adapted for minelaying.

## Training Ships—continued.



**JADRAN**

1954, Official.

Launched : 1932

Displacement : 720 tons  
Dimensions : 190 × 29½ × 13½ feet  
Sail Area : 8,600 sq. ft.  
Machinery : 1 Linke-Hofman Diesel. H.P. : 375 = 8 kts.

Notes.—Accommodation for 150 Cadets. Name means "Adriatic." While in Italian hands was named *Marco Polo*.

## Minelayer. (Minopolagaci)

**M 21 ZELENGORA** (ex-Orao, ex-M 97)

Builders : Techlenborg, Geestemünde  
Launched : 1918

Displacement : 330 tons standard (500 ton full load)  
Dimensions : 182 (w.l.), 192 (o.a.) × 23½ × 7 feet  
Guns : 2—3.9 inch AA., 4—3 pdrs.  
Machinery : I.H.P. : 1,800 tons = 15 kts.  
Oil fuel : 160 tons  
Complement : 71

Notes.—This name means "Eagle." While in Italian hands Orao was named *Vergada*.

## Landing Craft.

### New Construction.

Note.—New construction includes some landing craft of LCA, LCT and Siebel-ferry types.

**D 206** (ex-MZ 713) **M 717**

Displacement : 225 tons

Notes.—Ex-Italian. Launched 1942.

## Minesweepers (Minolovci)

### 16 Type 101.



M 109.

1954, Official.

Displacement : 90 tons  
Dimensions : 82 × 19½ × 6½ feet  
Guns : 1—20 mm.  
Machinery : Diesel. B.H.P. : 135-175

### 7 Ex-Italian Type 301.

**ML 301** (ex-RD 6) **ML 303** (ex-RD 21) **ML 305** (ex-RD 27) **ML 307** (ex-RD 29)  
**ML 302** (ex-RD 16) **ML 304** (ex-RD 25) **ML 306** (ex-RD 28)

Displacement : 151 to 156 tons  
Dimensions : 116 × 19½ × 6 feet  
Guns : 1—3 inch AA.  
Machinery : Triple expansion. I.H.P. : 750 = 10 kts.

Notes.—Formerly Italian. Launched 1917-19. A number of small armoured fishery vessels of wooden construction are used as minesweepers.

## Submarine Depot Ship (Matica za Podmornice).

**PB 21 MINER** (ex-Sitnica, ex-Najade)

Launched : 1891

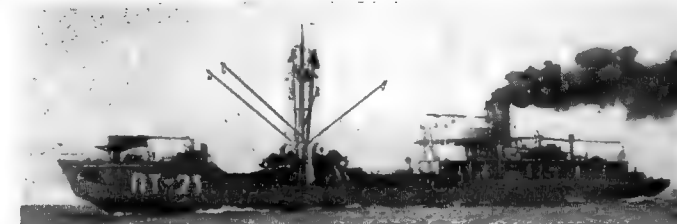
Displacement : 370 tons  
Dimensions : 157½ × 23 × 6½ feet  
Guns : 2—3 pdr.  
Machinery : Triple expansion. H.P. : 500 = 9 kts.

Notes.—Former name means "Dew." Italians renamed her *Curzola*.

## Minesweepers, etc.—YUGOSLAVIA

### Auxiliaries.

### 10 PT 82 Type. New Construction.



TUNJ.

1954, Official.

**PT 21 TUNJ** (ex-KRK, ex-Kt 6)

Displacement : 650 tons (834 tons full load)  
Dimensions : 221½ × 36 × 6½ feet  
Machinery : H.P. : 2,400 = 12 kts.

### River Monitors.

**SAVA** (ex-Bodrog)

Displacement : 330 tons (478 tons full load)  
Dimensions : 183½ × 31½ × 4 feet  
Guns : 2—4.1 inch in turrets, 3—40 mm. AA., 6—20 mm. AA.  
Speed : 12.5 kts.

Notes.—Refitted and completed 1952.

### River Gunboats.

### 2 RPC 200 Type.

Displacement : 30 tons  
Guns : 2—3 inch in turrets

### River Minesweepers.

### 14 RML 300 Type.

Displacement : 33 tons  
Guns : 1—20 mm.



YUGOSLAVIA—Patrol Vessels, etc

Patrol Boats

7 PBR 501 Type.

Displacement : 190 tons  
Dimensions : 134½ × 20½ × 7 feet  
Guns : 1—3 inch, 1—40 mm. AA., 1—20 mm. AA.  
A S Weapons : D.C.  
Machinery : Diesel. 2 shafts. B.H.P. : 3,300 = 20 kts.

Mining Tenders (*Tenderi minopolagaci*).



M Type. 1939, Official.

<b>M 31</b> (ex-Meljine)	<b>M 32</b>	<b>M 33</b> (ex-Mljet)
Builders : Launched : Displacement : Dimensions : Guns : Machinery :	Yarrow's Adriatic Yard, Kraljevica, 1931 130 tons 174 × 26½ × 13 feet 1—47 mm. Triple expansion. H.P. : 230 = 9 kts	

Notes.—Identification letters were formerly painted on bows : ME, Meljine ; MT, Mljet  
While in Italian hands M 31 and M 33 were named *Solta* and *Meleda*, respectively.

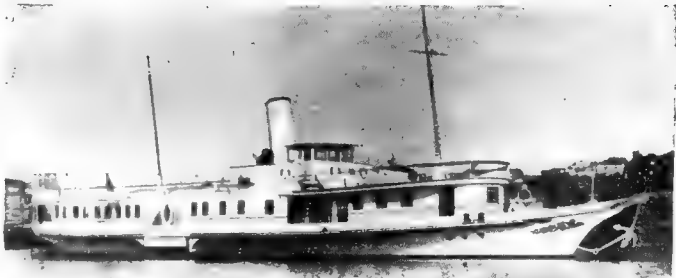
Salvage Vessel (*Brod za Spasavanje*).

**PS 11 SPASILAC**

Launched : Displacement : Dimensions : Machinery :	1929 740 tons 174 × 26½ × 13 feet Triple expansion. H.P. : 2,000 = 15 kts.
---	---

Notes.—Name means "Salvador." While in Italian hands she was called *Intangibile*.

River Patrol Vessels.



1939, Official.

**KRAJINA** (ex-Dragor)

Launched	1928
Displacement :	250 tons
Dimensions :	164 × 26½ × 3½ feet
Machinery :	H.P. : 480 = 10 kts.

Note.—Formerly served as Royal Yacht on Danube.

Yacht (*Jahta*).

**ISTRANKA** (ex-Vila, ex-Dalmata)

Displacement :	230 tons
Machinery :	H.P. : 325 = 12 kts.

Notes.—Name means "Nymph." Named *Fata* whilst in Italian hands, 1941-45.

Oilers.  
4 PN 13 Type.

Displacement : 695 tons

**ULJESURA**                      **KIT**

Displacement :	250 tons
----------------	----------

Water Carriers (*Vodonosci*).

8 New Construction.

Displacement : 250 tons

Note.—Of various types. Partly new construction.

River Tugs.

**RRM 11** (ex-Fruska Gora)

Tugs (*Remorkeri*).

**PR 52** (ex-San Remo)

Launched :	1937
Displacement :	170 tons
Machinery :	H.P. : 350 = 9 kts.

Note.—Ex-Italian.

**PR 58** (ex-Molara)

Launched :	1937
Displacement :	118 tons
Machinery :	H.P. : 250 = 8 kts.

Note.—Ex-Italian.



Added 1951.

"PORTO" Class.

**PR 51** (ex-Porto Conte)

Launched	1936
Displacement :	226 tons

Note.—Ex-Italian.

**PR 55** (ex-Snazi)

Launched	1917
Displacement :	100 tons
Machinery :	H.P. : 300 = 10 kts.

Notes.—Name means "Strong." Italian name, *Resistente*.

**PR 54** (ex-Ustrajni)

Launched	1917
Displacement :	160 tons
Machinery :	H.P. : 250 = 9 kts.

Notes.—Name means "Durable." Italian name, *Duradero*.

**LR 11** (ex-Basiluzzo)

Launched	1915
Displacement :	108 tons
Machinery :	H.P. : 130 = 8 kts.

Note.—Ex-Italian.

**PP 1** (ex-Marljivi)

Launched	1898
Displacement :	130 tons
Machinery :	H.P. : 300 = 12 kts.

Note.—Name means "Industrious."

## ADDENDA

## GREAT BRITAIN

Page 41.  
H.M.S. **GRAFTON**, anti-submarine frigate, launched 13 September, 1954.

Page 61.  
Add to "Dark" Class : **DARK BUCCANEER** and **DARK ROVER**.

Page 67.  
H.M.S. **CHALLENGER** has been handed over for scrapping.

## SOUTH AFRICA

Page 119.  
H.M.S. **BRAYFORD**, new construction anti-submarine seaward defence boat No. 3105 purchased from Great Britain, and renamed **GELDERLAND**.

## CHINA (COMMUNIST)

Page 152.  
Submarine observed in port of Tsingtao, manned by Chinese, Russian ex-German U-boat as shown on page 316 or one of the Russian "M" types as shown on page 319.

Communist naval vessels appeared to be in first class condition, but none of their exterior equipment, radar scanners, etc., were any more advanced than those fitted at the end of hostilities in 1945.

## DENMARK

Page 175.  
Details of motor torpedo boats under construction :—  
Displacement : 110 tons  
Dimensions : 120 × 18 × 6 feet  
Guns : 1—40 mm. AA., 1—20 mm. AA.  
Tubes : 2—21 inch  
Machinery : 3 Diesels. B.H.P. : 7,500 = 45 kts.  
Six of this type are to be built, but only two have been started.

## FRANCE

Page 213.

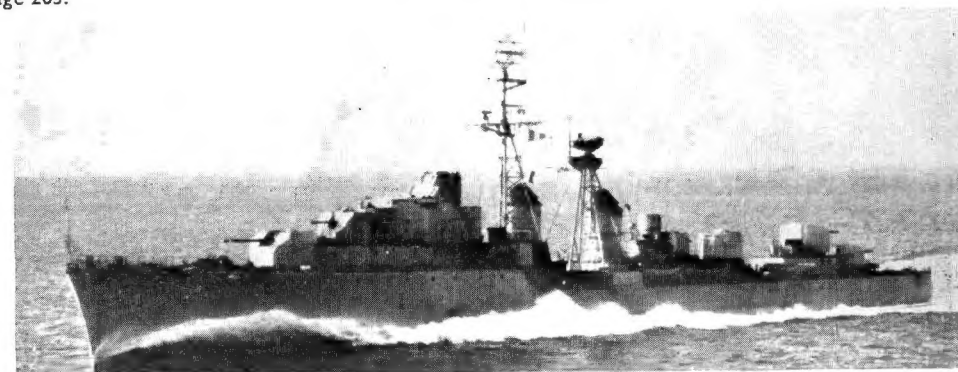


ACACIA.

1954, courtesy M. Henri Le Masson.

## FRANCE—continued

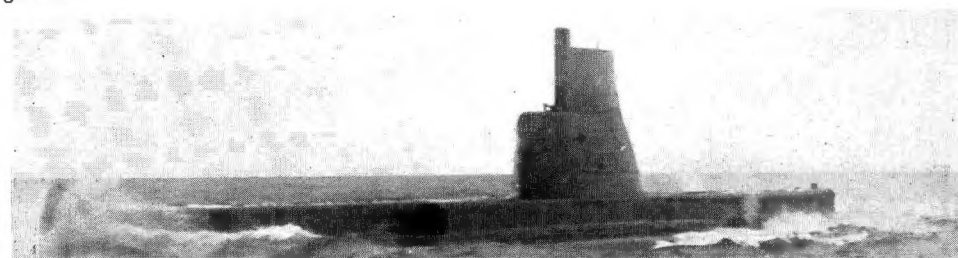
Page 203.



SURCOUF.

1954, courtesy M. Henri Le Masson.

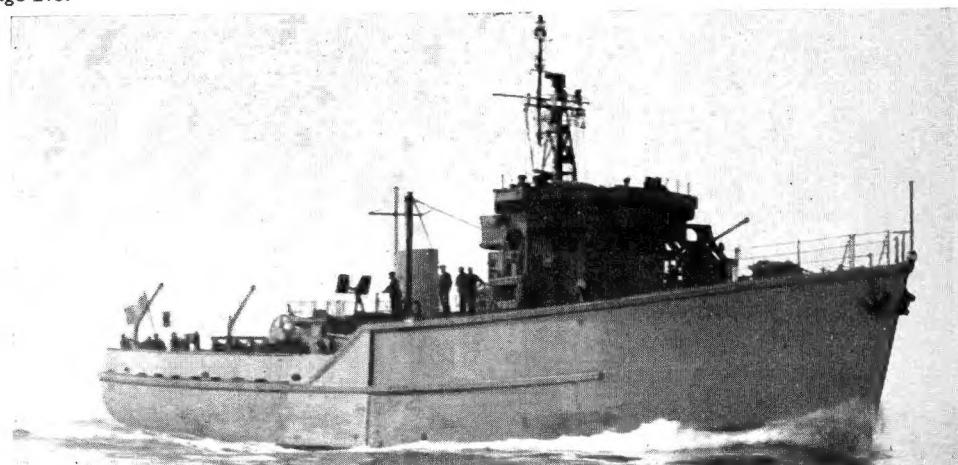
Page 210.



ARTEMIS.

1954, courtesy M. Henri Le Masson.

Page 213.



SIRIUS.

1954, French Navy Official.

GERMANY (WEST)

Page 222.

27 vessels, two of 750 tons displacement and remainder of 80 and 65 tons, each to be armed with Swiss-made 20 mm. gun, for West German frontier police Federal Sea Border Guards.

INDONESIA

Page 233.

To negotiate purchase in Great Britain of thirteen M.T.B.s.

JAPAN

Page 252.

Japanese Defence Bureau (opened 1 July) published new building programme 26 June :—1953 Estimates : 16 ships, cost ¥12,400,000,000 :

2 Destroyers (known as "A" Type Guard Ships) : Displacement : 1,600 tons ; Dimensions :  $347\frac{3}{4} \times 34\frac{1}{2} \times 21$  feet ; Guns : 3 or 4—5 inch, 2—40 mm., 1 Hedgehog, 8 D.C. ; Speed : 35 kts. ; Complement : 200. Builders : Mitsubishi (Nagasaki), New Mitsubishi (Kobe).

4 Destroyer Escorts (known as "B" Type Guard Ships) : Displacement : 1,000 tons ; Dimensions :  $287 \times 28\frac{1}{2} \times 18$  feet ; Guns : 2—3 inch, 2—40 mm., 1 Hedgehog, 8 D.C. ; Speed : 30 kts. ; Complement : 150. Builders : Kawasaki (Kobe), Shikawajima, Mitsui Zosen (Tamano).

1 Supply/Repair Ship : Displacement : 1,000 tons ; Dimensions :  $213\frac{1}{4} \times 34\frac{3}{4} \times 18\frac{1}{2}$  feet ; Guns : 1—3 inch ; Complement : 88. Builders : Mitsubishi (Yokohama).

1 Minesweeper : Displacement : 600 tons.

2 Medium Minesweepers : Displacement : 320 tons (wooden hull) ; Dimensions :  $137\frac{3}{4} \times 27\frac{1}{2} \times 12\frac{1}{2}$  feet ; Guns : 1—20 mm. Complement : 40.

6 MTBs (known as "C" Type Guard Ships) : Displacement : 60 tons ; Dimensions :  $88\frac{1}{2} \times 22 \times 10$  feet ; Guns : 2—20 mm. (twin) ; Tubes : 2 ; Speed : 25 kts. ; Complement : 19.

1954 Estimates : 8 ships, cost ¥5,200,000,000 :

8 Submarine Chasers : Displacement : 300 tons.

Total of 24 ships ordered from August onwards.

(1954 programme also included 3 MTBs ("C" Type) and 2 small minesweepers of 30 tons type).

Officially ship types divided into seven classes :—

1. Guard Ships. 2. Minesweepers. 3. Minelayers. 4. Guard Boats. 5. Small Minesweepers. 6. Submarine Chasers. 7. Miscellaneous.

(1. to 6. are known as Defence Vessels.)

Old Rising Sun ensign revived again for the ships of Defence Fleet (name given to former National Safety Board) not including the ships of Maritime Safety Agency, from 1 July.

17 warships to be acquired from the United States expected to comprise two large destroyers of 2,425 tons, three destroyers of 1,630 tons, two destroyer escorts of 1,400 tons, two submarines of 1,525 tons, five minesweepers, two tank landing ships, and one repair ship of 7,000 tons. Total 27,000 tons. (Mutual Security Act originally permitted the United States to make available vessels only up to 15,000 tons.)

Japan is expected to ask for similar loan arrangements of a "large number" of heavier warships, including escort aircraft carriers of 7,800 tons displacement (10,400 tons full load), during the Fiscal year 1954-55.

Japanese Maritime Safety Board is arming eight of its largest ships. They are the first Japanese ships to be armed since the end of the Second World War. These ships, all of more than 500 tons, will mount 3-inch guns and 40 mm. AA. weapons. The Board plans to arm 95 gunboats and 218 small vessels for fishery protection.

PERSIA

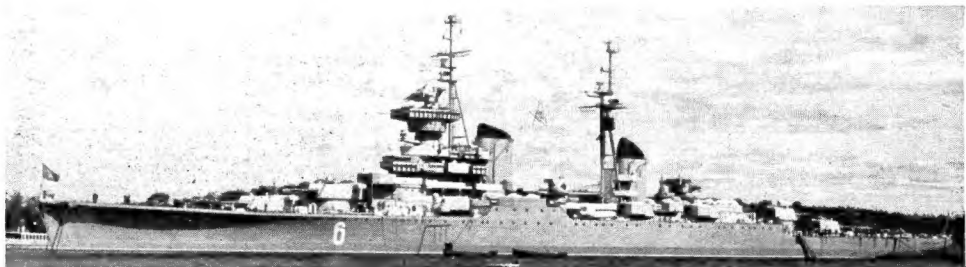
Page 279.

Contract placed in Italy for ten gunboats.

RUSSIA

Page 305.

"Sverdlov" class. There are two slightly different types of "Sverdlov" class cruisers. The **SVERDLOV** and others have the 37 mm. AA. guns near the fore-funnel one deck higher than in later cruisers. New cruisers names reported are **DIMITRI DONSKOI**, **MIKOJAN**, **OLEG**, **RURIK**, **SUVOROV** (not confirmed).



ADMIRAL USHAKOV.

1954, Ossi Janson.

Page 309.

"Skori" class. Numbers of destroyers reported are 13, 14, 25, 27, 31, 35, 40.

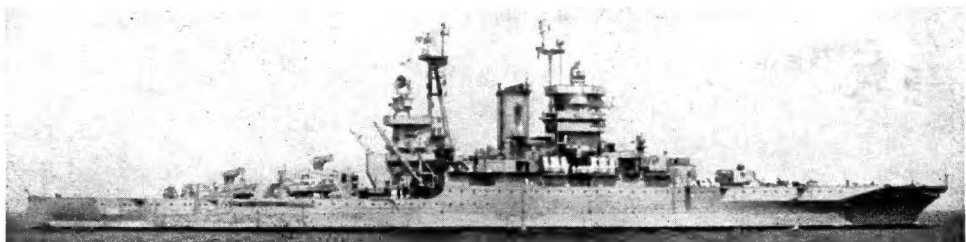
TURKEY

Page 366.

Ex-U.S. submarines. **GUIVARRO** renamed **PREVESE** ; **HAMMERHEAD** renamed **CERBE**.

UNITED STATES

Page 435.



MISSISSIPPI (equipped with guided missile launchers aft)

1954, U.S. Navy, Official.

YUGOSLAVIA

Page 464.

Fleet to be expanded. Building programme envisages production of 77 vessels, 64 of which are under construction.

# International

*supply paints to over  $\frac{1}{3}$ <sup>rd</sup>  
of the world's ships*

*one of the  
ships*



*one of the  
products*

## SILVER PRIMOCON

**specified for 3,400,000 g.t.**

of vessels built and building in the U.K. alone.

Silver Primocon is recognised as the outstanding bare plate primer for underwater surfaces.

### International Paints Ltd.

Head Office: GROSVENOR GARDENS HOUSE, LONDON, S.W.1

TELEPHONE: TATE GALLERY 7070 (15 LINES)  
TELEGRAMS, INLAND: CORROFOUL SOWEST, LONDON OVERSEAS: CORROFOUL LONDON

REGISTERED  TRADE MARK

MAIN FACTORY IN U.K. FELLING-ON-TYNE

ASSOCIATED FACTORIES IN

AUSTRALIA	SYDNEY	GERMANY	HAMBURG	NEW ZEALAND	WELLINGTON
BRAZIL	RIO DE JANEIRO	ITALY	GENOA	SPAIN	BILBAO
CANADA	MONTREAL	ITALY	TRIESTE	SWEDEN	GOTHENBURG
CANADA	VANCOUVER	JAPAN	KOBE	U.S.A.	NEW YORK
DENMARK	COPENHAGEN	MEXICO	MEXICO CITY	U.S.A.	SAN FRANCISCO
FRANCE	LE HAVRE	NORWAY	BERGEN	VENEZUELA	MARACAIBO

M.V. "St. John"—one of the many ships painted throughout with "International" products.

Owners: The South American Saint Line Ltd., Cardiff.

Builders: J. L. Thompson & Sons Ltd., Sunderland



